

Manitoba Water Stewardship
Gestion des ressources hydriques Manitoba

**Annual Report
2007-2008**

**Rapport annuel
2007-2008**

Manitoba 





MINISTER OF WATER STEWARDSHIP

Legislative Building
Winnipeg, Manitoba
CANADA R3C 0V8

His Honour The Honourable John Harvard, P.C., O.M.
Lieutenant-governor of Manitoba
Room 235
Legislative Building
Winnipeg MB R3C 0V8

Your Honour:

I am pleased to present the Annual Report of Manitoba Water Stewardship for the year ending March 31, 2008.

Manitoba Water Stewardship is committed to the complex goals of: protecting aquatic ecosystem health; restoring and preserving the societal and economic values of our waterways, lakes and wetlands; and managing water use for human needs for today and for the future.

The Department's Annual Report details the Department's many accomplishments over the past fiscal year including:

- A new Instream Flow Program (IFN) was initiated to address instream flow need for the protection of aquatic ecosystem health. This program is intended to meet legislated responsibilities detailed in the *Water Protection Act (2005)*.
- The sustainable development education website was enhanced to further integrate sustainable development concepts into the new Kindergarten to Grade 4 Manitoba Science Curriculum.
- The establishment of a dedicated Water Control Works and Drainage Licensing Branch.
- The development of an enforcement program for two regulations under the *Drinking Water Safety Act* by the Office of Drinking Water.

- Continued scientific research in an effort to identify E. coli at Lake Winnipeg beaches to protect human health and to research underlying causes and better models for predicting levels in the future.

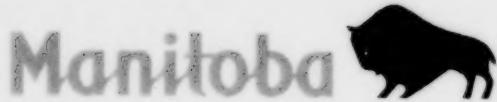
We are privileged to have an abundance of high-quality water in Manitoba to support our environment, economy and society and I am pleased to report on the Department's accomplishments in the stewardship of this resource for current and future generations.



Respectfully Submitted,

A handwritten signature in black ink, appearing to read "C. Melnick".

Christine Melnick
Minister of Water Stewardship



**Deputy Minister of
Water Stewardship**

**Legislative Building
Winnipeg, Manitoba
Canada
R3C 0V8**

The Honourable Christine Melnick
Minister of Water Stewardship
Room 314, Legislative Building
Winnipeg MB R3C 0V8

Dear Minister:

I am pleased to provide the Annual Report of Manitoba Water Stewardship for the year ending March 31, 2008.

The Report profiles the accomplishments of the Department that contribute to the safety, security, and management of the Province's water resources. Detailed information on programs, their objectives and key results is reported along with statistical information related to key activities and performance measures.

Respectfully submitted,

Don Norquay
Deputy Minister



List of Tables	3
HIGHLIGHTS	6
The French version of this document is available on the Internet at http://www.gov.mb.ca/waterstewardship La version française de ce document est disponible sur l'Internet à http://www.gov.mb.ca/waterstewardship	
Administration and Finance	9
Minister's Salary	9
Executive Support	9
Administration and Finance	9
Information Technology Services	11
ECOLOGICAL SERVICES	13
Administration	13
Planning and Coordination Branch	14
Water Science and Management - Administration	18
Water Science and Management - Groundwater Management	19
Water Science and Management - Surface Water Management	21
Water Science and Management - Water Quality Management	22
Fisheries Branch - Administration	24
Fisheries Branch - Aquatic Ecosystem Management	25
Fisheries Branch - Sport and Commercial Fishing Management	28
Fisheries Branch - Regional Fisheries Resources	30
Fisheries Branch - Northern Fisherman's Freight Assistance	33
Fisheries Branch - Fisheries Enhancement Fund	34
Conservation District and Watershed Assistance	43
REGULATORY AND OPERATIONAL SERVICES	45
Regulatory and Operational Services - Administration	45
Flood Forecasting and Flood Response Coordination	45
Water Control System Management	46
Regulatory Services - Office of Drinking Water	48
Regulatory Services - Water Control Works and Drainage Licensing	49
Regulatory Services - Water Use Licensing	50
Water Stewardship Initiatives	53
Costs Related to Capital Assets	59
PART B – CAPITAL INVESTMENT	60
Sustainable Development Activities and Accomplishments	61

The French version of this document is available on the Internet at <http://www.gov.mb.ca/waterstewardship>
La version française de ce document est disponible sur l'Internet à <http://www.gov.mb.ca/waterstewardship>

Revenue and Expenditure Summaries	67
MANITOBA WATER STEWARDSHIP – Performance Reporting Table	73
GESTION DES RESOURCES HYDRIQUES MANITOBA – Tableau d'information sur le rendement 2007-2008.....	82
The Public Interest Disclosure (Whistleblower Protection) Act.....	92
Loi sur les divulgations faites dans l'intérêt public (protection des divulgateurs d'actes répréhensibles)	93
LEGISLATION	94
Publications	95

LIST OF TABLES

AF.1	Expenditure, Minister's Salary	9
AF.2	Expenditure, Executive Support	9
AF.3	Employment Equity Representation	11
AF.4	Expenditure, Administration & Finance	11
AF.5	Expenditure, Information Technology Services	12
EC.1	Expenditure, Ecological Services, Administration	13
EC.2	Expenditure, Planning and Coordination	18
EC.3	Expenditure, Water Science and Management Branch, Administration	19
EC.4	Expenditure, Groundwater Management	21
EC.5	Expenditure, Surface Water Management	22
EC.6	Expenditure, Water Quality Management	23
FI.1	Expenditure, Fisheries Branch, Administration	25
FI.2	Distribution to Sport Fishing Waters from Fish Hatcheries	27
FI.3	Expenditure, Aquatic Ecosystem Management	28
FI.4	Expenditure, Sport and Commercial Fishing Management	30
FI.5	Expenditure, Regional Fisheries Resources	33
FI.6	Expenditure, Northern Fishermen's Freight Assistance	34
FI.7	Expenditure, Fisheries Enhancement Fund	34
FI.8	Fishers Employed in Manitoba Commercial Fishery, 2006/07	35
FI.9	Commercial Fishing Production (round Kg), Total Value and Employment (of Licensed Fishers Plus Hired Persons) 1997/98 to 2006/07	36
FI.10	Commercial Fishing Production (round weights kg) by Area and Total Value by Species, 2006/07	37
FI.11	Angling Licence Sales and Revenue 1997/98 to 2006/07	38
FI.12	Bait Fishing Industry Statistics	40
FI.13	Manitoba Fish Farming Statistics	41
FI.14	Fisheries Monitoring 2006/07	42
CA.1	Expenditure, Conservation District and Watershed Assistance	44
RS.1	Expenditure, Regulatory and Operational Services, Administration	45
RS.2	Expenditure, Flood Forecasting and Flood Response Coordination	46
RS.3	Expenditure, Water Control System Mgmt	48
RS.4	Expenditure, Office of Drinking Water	49
RS.5	Expenditure, Water Control Works and Drainage Licencing	50
RS.6	Expenditure, Water Use Licensing	51
RS.7	Expenditure, Waterway Planning and Operational Services Support	52
WS.1	Expenditure, Water Stewardship Initiatives	58
CI.1	Expenditure, Costs Related to Capital Assets	59
CI.2	Expenditure, General Assets	60
RE.1	Reconciliation Statement	67
RE.2	Revenue Summary by Source	68
EX.1	Expenditure Summary	69
EX.2	Five-Year Expenditure and Staffing Summary by Appropriation	72

LIST OF FIGURES

Organization Chart	4
Organigramme	5

Manitoba Water Stewardship
 Organizational Chart
 As of April 1, 2008

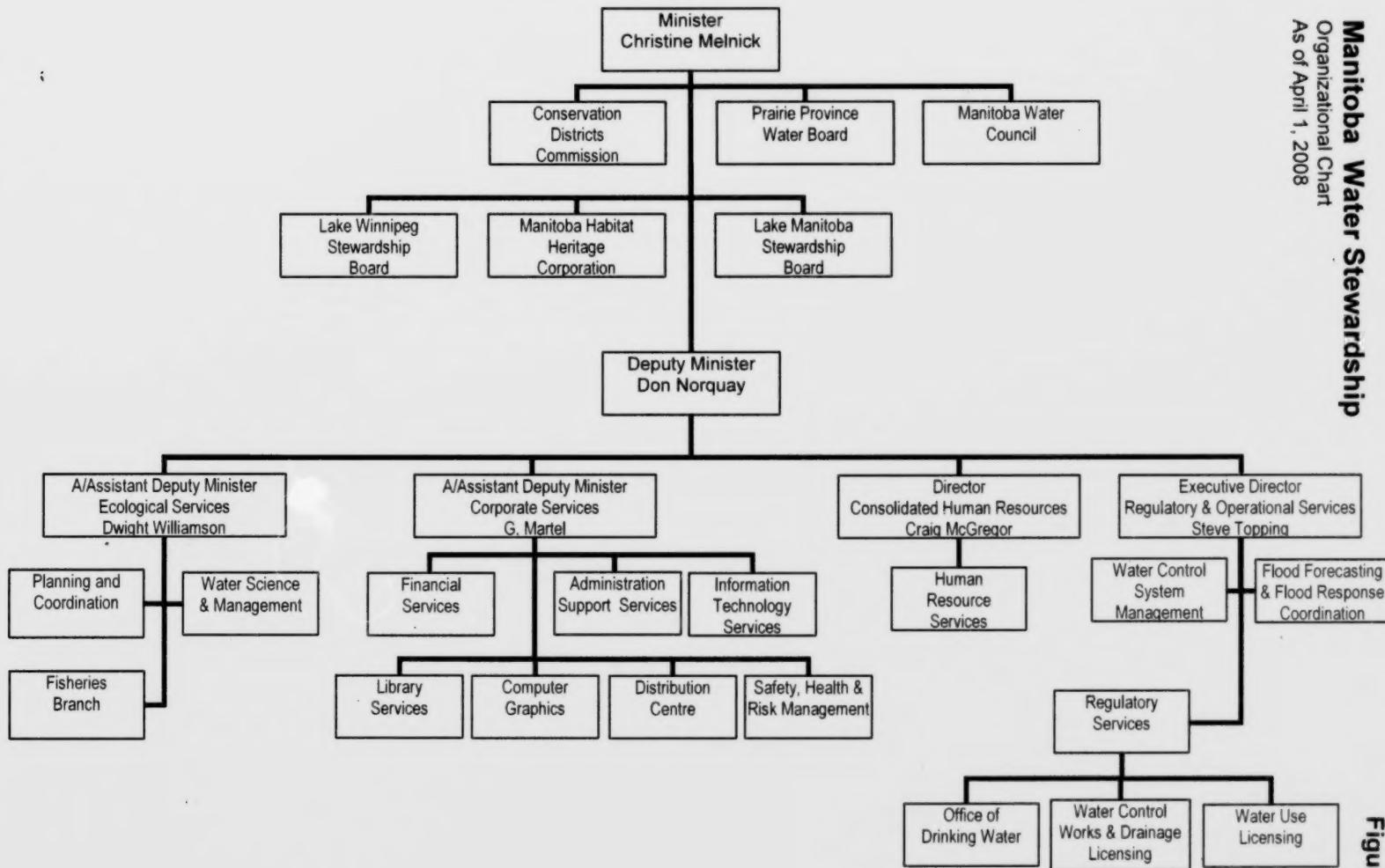


Figure 1

Gestion des ressources hydriques

Manitoba

Organigramme

En vigueur 1er Avril, 2008

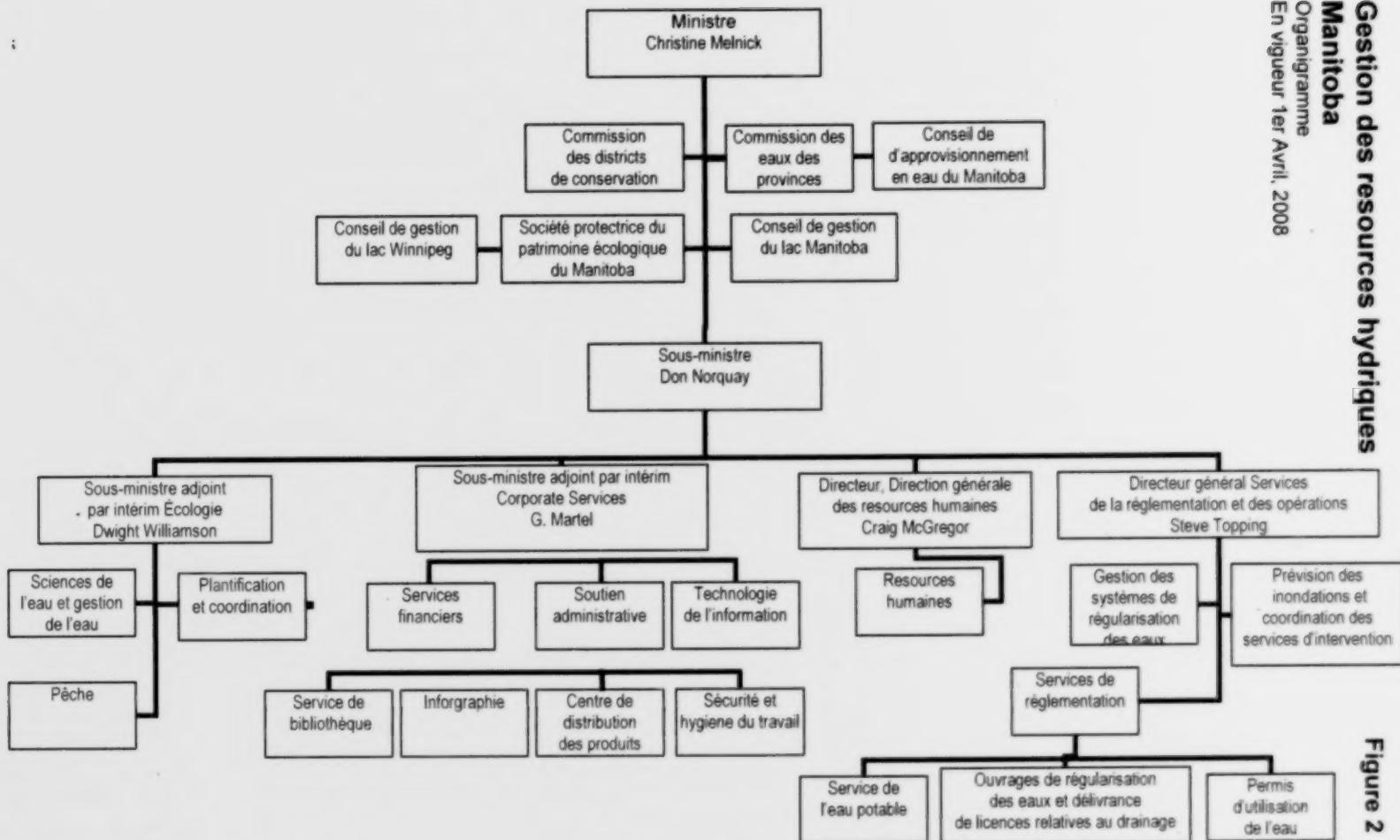


Figure 2

HIGHLIGHTS

Ecological Services Division:

- The Conservation Districts Program continued building provincial/municipal partnerships in watershed management with total water protection expenditures exceeding \$7.5 million of which \$4.835 million was provincial conservation district grants. The six conservation districts designated water planning authorities continued the development of seven watershed management planning processes. Staff coordinated workshops building capacity in watershed governance, planning and responsibilities of provincial appointees and continued liaison with 26 municipal authorities drafting conservation district formation, expansion, and merger proposals.
- The Conservation District Commission drafted the Conservation District Program - Framework for the Future discussion document and released it for public comment in December 2007. The intent of the document is to evaluate the program and articulate a clear vision on strategies and priorities for the program over the next 15 to 20 years. A series of consultations were undertaken with the Manitoba Conservation Districts Association, Association of Manitoba Municipalities, individual conservation districts and other interested stakeholders.
- A merger proposal was finalized between Tiger Hills Conservation District and Mid Assiniboine River Conservation District to form the new Assiniboine Hills Conservation District. This new district includes expansion into the rural municipalities of Whitewater, Riverside, Oakland and the Village of Wawanesa.
- Four new watershed planners were hired and established regional offices throughout municipal Manitoba to support integrated watershed planning and watershed governance capacity building.
- Manitoba Water Stewardship provided support to the Government of Manitoba to intervene in projects that pose a threat through the potential introduction of foreign biota to Manitoba water, including the operation of the Devils Lake outlet, diversion of Missouri River water to the Hudson Bay basin via the Northwest Area Water Supply, and the Red River Valley Water Supply initiatives.
- Additional long-term water quality monitoring stations were established in collaboration with several conservation districts across Manitoba. The Water Quality Index was calculated for each new water quality monitoring station and will be used as input to watershed planning and state of the watershed reporting.
- Specific research is continuing to identify the main source of *E. coli* at Lake Winnipeg beaches and the mechanism by which *E. coli* is transferred from this source to bathing areas. The goal of this work is to protect human health, provide scientific data to support management decisions, and provide sufficient scientific data to support a model that will provide the bathing public with real-time, daily predictability of *E. coli* levels.
- Technical and administrative assistance was provided for the development and implementation of the Nutrient Management Regulation, passed on March 18, 2008. The regulation protects water quality by encouraging responsible nutrient planning, regulating the application of materials containing nutrients and restricting the development of certain types of facilities in environmentally sensitive areas.
- Consultations were undertaken on approaches for reducing nutrient contributions from urban and rural residential areas including lawn fertilizers and cleaning products (e.g. automatic dishwashing detergents). New "first in Canada" legislation to limit the phosphorus content in cleaning products such as automatic dishwashing detergents was introduced. An amendment to the Nutrient Management Regulation was proposed to restrict the phosphorus content in fertilizers used in urban and rural residential areas.
- Mercury in fish consumption guidelines were updated and distributed to the public and stakeholders through a new brochure and web site.

- The department gained an improved understanding of the groundwater resources of much of south-central and southeastern Manitoba through test drilling and installation of monitoring wells, groundwater sampling and age dating, aquifer testing and progress toward development of a three-dimensional digital groundwater model of the area. This model will be used, in conjunction with monitoring and water quality information, to evaluate the sustainable yield of major aquifers in this part of Manitoba where groundwater is heavily utilized. The operational model will be completed in early FY2008/09.
- The Fisheries Enhancement Fund was established in March 2007, replacing the Fisheries Enhancement Initiative program. The Fisheries Enhancement Fund expanded on existing programming by including new categories of: fisheries research; fish stock assessment and monitoring; fisheries development, through capital investment and stocking; fisheries habitat rehabilitation and enhancement; and fisheries education initiatives. The project review committee includes broader representation from a number of associations and stakeholders who have an interest in enhancing Manitoba's fisheries.
- A new Instream Flow Needs Program was initiated to address instream flow needs for the protection of aquatic ecosystem health. This program is intended to meet the legislated responsibilities detailed in *The Water Protection Act* (2005).
- The "Long Service Fisher Award", which was introduced in 2007 by Manitoba Water Stewardship and the Manitoba Commercial Inland Fishers Federation, recognizes the contributions of commercial fishers to Manitoba's social and cultural foundations and economic well-being and who have been involved in commercial fishing for 50 years or more. In conjunction with the Long Service Fisher Award, MCIFF, in partnership with Manitoba Water Stewardship, also distributed an Exceptional Contribution Award to recognize certain individuals from their organization who have made notable, life-long contributions to Manitoba's commercial fishing industry. This year, 27 Long Service Fisher Award plaques and four Exceptional Contribution Awards plaques were distributed.
- Fisheries Branch continues to coordinate Winnipeg's Urban Angling Partnership. The Urban Angling Partnership, comprised of Manitoba Wildlife Federation, Fish Futures Inc., Mid-Canada Marine Dealers Association, The Complete Angler, City Cats, City of Winnipeg and Government of Manitoba, offers residents and visitors recreational angling opportunities through structured programs. These include: Learn to Fish clinics, Winnipeg Fish Festival, youth angling camps, Fish Winnipeg Media/Corporate Challenge (monies raised for youth angling programs) and Urban Fall Fishing Derby. The program's goal is to encourage participation in recreational fishing and address declining angling licenses sales.
- Fisheries Branch staff participated in the Manitoba Envirothon, an annual Olympic-style academic and environmental program for high school students, by co-chairing the Test Writing Committee. This year the competition was held in Pinawa with 34 Manitoba school teams entered.
- The sustainable development education website was enhanced with 14 more classroom activities to further integrate sustainable development concepts into the new Kindergarten to Grade 4 Manitoba Science Curriculum. The site was promoted at Manitoba Education workshops, seminars and conferences (including the provincial Special Area Group Science conference), and educational institutions throughout the province. The site provides educators and students with on-line fisheries information and grade-specific exercises to meet prescribed outcomes.

Regulatory and Operational Services Division:

- The Office of Drinking Water continued monitoring public water systems to ensure safety of water supplies. Ninety per cent of all water systems currently comply with the required testing schedule, providing water to 90 per cent of Manitoba's population. Rapid progress has been made since 2003 when the level of compliance was 72 per cent.
- The Office of Drinking Water developed an enforcement program for two regulations under *The Drinking Water Safety Act*, enacted on March 1, 2007. The Drinking Water Quality Standards Regulation and the Drinking Water Safety Regulation establish clear water quality standards, including bacterial and microbial levels that are to be met by public and semi-public (small systems with less than 15 service connections

[e.g., restaurants, hospitals, daycares]) water systems. New processes were implemented for issuing construction permits and operating licences to public water systems. Application forms and supporting guideline documents were prepared in printed and electronic form, and made available on the Office of Drinking Water website. Operating licence applications are being processed and operating licences are being issued for the approximately 390 public water systems in Manitoba.

- The department established a dedicated Water Control Works and Drainage Licensing Branch with 24 positions. As of March 31, 2008, 20 positions had been staffed, including 14 new Water Resource Officers. New offices were established in Stonewall, Deloraine, Grosse Isle, Arborg, Neepawa, Shoal Lake and Swan River to complement existing offices in Dauphin, Brandon, Gimli, and Morris.
- Support for the Water Control Works and Drainage Licensing Branch was strengthened through the addition of new positions within the Water Control Systems Management section and senior management capacity was strengthened through the addition of a new Director for the Regulatory Services Branch.
- A regulation under *The Summary Convictions Act* was amended to introduce set fines for offences under *The Water Rights Act*. This change allows Water Resource Officers to issue tickets immediately upon identifying an offence. All new Water Resource Officers received enforcement training. Equipment and software were updated to facilitate licensing and enforcement activities, and data on licence applications, complaints, and enforcement activities was entered into a database to facilitate performance tracking and reporting.
- For the provincial waterway infrastructure, multi-year capital planning was undertaken in concert with the Department of Infrastructure and Transportation. The works include agricultural drainage and other waterways, water crossings, water control structures, dams and diking systems.
- Technical and engineering input, advice, planning assistance, assessments, and information was provided for integrated watershed management plans and surface water management plans, being developed by watershed planning authorities. Similar technical and engineering services were provided to conservation districts for a variety of water management problems and water infrastructure proposals, as well as for the capital works program planning process in conservation districts that manage provincial waterway infrastructure.
- The procurement of a provincially-owned ice-breaker was advanced through to the contract award stage, in concert with the North Red Community Water Maintenance Inc, and the Fleet Vehicles Agency that will assume ownership of the ice-breaker.
- Emergency preparedness plans were initiated for the Morden Dam and for the Rivers Dam, both of which are provincial waterway dams, in an engineering consultant contract with SNC-Lavelin Engineering. Along with participants from Manitoba Hydro, the City of Winnipeg, and a number of engineering consulting firms, plans for the 2008 Annual Canadian Dam Association conference in Winnipeg were initiated.
- A database of maps, plans, field/survey information and reports regarding provincially owned water control infrastructure and water management was maintained and migration to an electronic platform continued.

ADMINISTRATION AND FINANCE

The Administration and Finance Division provides executive management of programs and management services, including financial; human resource; technology; and administrative support.

Minister's Salary

The Minister's salary provides the Minister with additional compensation to which an individual appointed to Executive Council is entitled.

Table AF.1

25.1(a) Minister's Salary

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	42.1	1.00	31.0	11.1	1
Total Sub-Appropriation	42.1	1.00	31.0	11.1	

1. Over expenditure is due to in year increase for the Minister's Salary

Executive Support

This area comprises support staff in the offices of the Minister and Deputy Minister of Manitoba Water Stewardship.

The purpose of Executive Support is to develop, implement and oversee policies and programs that are designed to attain, over the long term, the goals set out in the department's role and mission statement; advise the Minister on matters relating to the department; provide policy direction for departmental programs; co-ordinate departmental communications activities and initiatives; and provide administrative support for the offices of the Minister and Deputy Minister.

Table AF.2

25.1(b) Executive Support

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	662.2	9.00	585.3	76.9	1
Other Expenditures	96.3		200.2	(103.7)	2
Total Sub-Appropriation	758.5	9.00	785.5	(26.8)	

1. Over expenditure is due to severance paid out for retirements in 2007/08.

2. Under expenditures is due to reduced operating expenses as a result of vacant Deputy Minister position.

Administration and Finance

This area provides corporate services shared with Manitoba Conservation, including administrative; financial; library; public information services; safety and health; equipment warehouse; and information technology. Administration and Finance also distributes and administers angling licences. In addition, Human Resources services are provided through a sector-based service shared with other departments.

Key Resulted Achieved:

Administrative services provided include: fleet vehicle coordination; office accommodation and parking administration; records management; coordination of departmental French language services; coordination of the department's compliance with *The Freedom of Information and Protection of Privacy Act*. In 2007, the department received 305 requests under *The Freedom of Information and Protection of Privacy Act*.

Financial services provided include: processing of revenue and expenditures in accordance with legislative requirements, provincial and departmental policy, and accounting policies; preparing financial forecasts and budgetary estimates; asset management; and overall comptrollership support. Advice, guidance, and administration related to contracts and grants are also provided.

The **Conservation and Environment Library** supports access to print and electronic specialized information resources for Manitoba Conservation, Manitoba Water Stewardship, Environment Canada in Winnipeg, the Canadian Council of Ministers of the Environment, and the public. Inter-library loans are coordinated with other Manitoba libraries and educational institutions. Current information related to the mandates of each partner organization is made available to staff and the public. In 2007/08, the library responded to over 2,800 inquiries for information.

The Licensing Section manages a province-wide network of licence vendors through which convenient access is provided to the public for angling, hunting, migratory waterfowl, trapping, fur dealer, park vehicle entry, camping, arborist and various other licences and permits. In 2007/08, Licensing Section recorded 716,505 transactions with net revenue of \$13,681,734.78; managed 824 private and 146 departmental licence vendors; and administered vendor activity that included 54 new appointments, 62 discontinuances, four suspensions, and 23 reinstatements.

The Public Information section is responsible for providing information to the public regarding the numerous programs delivered by the departments of Conservation and Water Stewardship. This service is provided in person, by telephone, Internet and mail. The section responded to the following requests for information and assistance:

- 36,928 direct telephone requests to the Information Officers
- 35,509 calls were received by the automated Public Information Line, of which 10,450 were handled directly by the line
- 71,153 in person requests
- 1,052 requests through the Internet
- 5,217 information packages mailed.

The Safety, Health and Risk Management section provides leadership, direction and support to the departments and senior management on compliance with recognized standards in these areas through policies, monitoring and training. Safety, Health and Risk Management completed work on a policy manual, which was distributed to Manitoba Water Stewardship and Manitoba Conservation offices throughout the province.

The **Computer Graphics** unit provides Geographic Information System (GIS), graphic design and Computer Aided Design and Drafting services to Manitoba Conservation and Manitoba Water Stewardship. The GIS component of Computer Graphics is responsible for providing expertise in the creation of spatial data, spatial data analyses, and preparation of customized geo-referenced maps. The Graphic Design component produces informational material required for internally supporting various programs, policies, and initiatives. Specialized Computer Aided Design and Drafting services include preparation of engineering plans for capital works and infrastructure maintenance projects.

Human Resource Services are shared with other departments on a sector basis. Statistics specific to Water Stewardship are as follows:

Staffing

- There were 99 staffing actions in 2007/08, of which 39 were through competitive appointments; nine direct appointments; 18 acting status appointments; seven lateral transfer appointments; 11 term and departmental appointments; nine Order-In-Councils; and six other staffing transactions. In addition, Human Resource Services processed 12 term extensions throughout the year.

- Guidance and advice were provided on recruitment and management for 15 Departmental (seasonal) employee positions, for which managers are delegated authority to recall and recruit. There were no selection appeals during 2007/08.

Labour/Employee Relations

- Provided guidance and advice to management on eight labour relations issues, including appropriate course of action and negotiating settlements or resolutions to resolve issues before the formal grievance stage. Three formal grievances were initiated and all have been resolved and closed.

Classification

- During 2007/08, 16 position classifications were reviewed and completed. There were no classification appeals. At March 31, 2008, 30 classification requests remain outstanding.

Pay and Benefits

- Processed pay and benefits for 190 staff.
- Provided guidance and advice on pay administration issues.

Organizational Review and Development

- Provided guidance and advice on implementation of organizational changes and maintained organizational charts.

Employment Equity

- Employment Equity continues to be a consideration in all staffing and acting status activities.
- Liaison with schools and organizations to promote careers within the Department.
- Participation at a number of career fairs.
- Developed a Diversity and Employment Equity Strategy.

Table AF.3

Employment Equity Representation: March 31st, 2005 to March 31st, 2008

Fiscal Year	Total		Male		Female		Aboriginal		Persons with Disability		Visible Minority	
	#	%	#	%	#	%	#	%	#	%	#	%
2004-05	282	100	230	81.6	52	18.4	27	9.6	5	1.8	15	5.3
2005-06	284	100	225	79.2	59	20.8	33	11.6	8	2.8	12	4.2
2006-07	173	100	122	70.5	51	29.5	21	12.1	5	2.9	7	4.0
2007-08	190	100	124	62.3	66	34.7	20	10.5	5	2.6	11	5.8
Government Goal				50.0		50.0		14.0		7.0		8.0

Table AF.4

25.1(c) Administration and Finance

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	292.3	5.00	273.1	19.2	
Other Expenditures	33.7		80.3	(46.8)	1
Total Sub-Appropriation	326.0	5.00	353.4	(27.6)	

1. Under expenditure is due to in year expenditure management.

Information Technology Services

The Branch provides internal information technology services and expertise, including technology and business consulting, systems analysis, design, implementation, corporate database management, and development and

management of a yearly department-wide information technology systems plan. The Branch develops and maintains the Manitoba Land Initiative spatial data warehouse.

Key Results Achieved:

- Support and development enhancements to several business applications continued in 2007/08, including custom web site development for the Water Licensing application and associated web mapping site, the Environment Management System, the water well drilling management application (GWDrill), the MAPS web system, and several other departmental business applications.
- Enhancements to the Manitoba Land Initiative data warehouse were completed in 2007/08. The the Manitoba Land Initiative warehouse contains all government geospatial GIS data and related databases and meta-data with interactive mapping tools and is available online to the general public via the Internet. A new interactive map server was configured to provide seamless access of data for viewing and product downloading. A new web interface was also developed in conjunction with the federal government Geo-Connections to provide for a meta data search capability of Manitoba data through the federal web portal.
- The Branch continued development of additional web pages to meet the needs of the public while enhancing the departmental site and applying government-wide standards and templates.

Table AF.5
25.1(d) Information Technology Services

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	324.6	1.00	308.6	16.0	
Other Expenditures	14.6		14.4	0.2	
Total Sub-Appropriation	339.2	1.00	323.0	16.2	

ECOLOGICAL SERVICES

Administration

Staff provide the necessary direction and program coordination for the Ecological Services Division to ensure sustainable development, allocation, and conservation of water resources by developing new policy direction and adhering to current policy and procedures. Staff oversee funding, negotiate and administer contracts and monitor efficiency and effectiveness of expenditures.

Table EC.1
25.2(a) Administration

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	221.4	3.00	265.4	(44.0)	1
Other Expenditures	39.1		68.5	(29.4)	2
Grants	22.9		25.0	(2.1)	
Minor Capital	239.0		276.7	(37.7)	3
Total Sub-Appropriation	522.4	3.00	635.6	(113.2)	

1. Under expenditure is due to vacancies in the branch.
2. Under expenditure is due to lower operating expenses as a result of vacancies.
3. Under expenditure is due to delay in dam site investigation and other reductions in minor capital purchases.

Planning and Coordination Branch

The Planning and Coordination Branch, through the four sections of Watershed Planning and Programs, Basin and Aquifer Planning, Information and Knowledge Management, and Policy and Legislation, leads, directs and coordinates:

- the strategic planning process of Manitoba Water Stewardship;
- the development of provincial water policy and legislation;
- the provision of advice and secretariat support to the Manitoba Water Council;
- the implementation of the watershed planning provisions of *The Water Protection Act*;
- the provision of advice and support to Conservation Districts Boards to enable the effective delivery of their mandate to deliver conservation-based soil and water programs within local communities;
- the development of basin, aquifer and major water body sustainable management plans;
- the review of proposed developments to ensure consistency with legislative requirements and approved watershed plans;
- the implementation of business processes that streamline the collection, organization and dissemination of knowledge and information;
- the use of spatial and non-spatial data and services in support of information and knowledge management and decision making activity; and
- web site development, development of web services, and active management of website function and content in support of an effective and efficient information network and knowledge distribution methodology.

Basin and Aquifer Planning:

The Basin and Aquifer Planning Section coordinates community-based aquifer management planning, supports aquifer management advisory boards, leads Manitoba's participation in large basin (inter-provincial and international) planning and coordinates the department's review of development related proposals and projects.

Key Results Achieved:

- Established the Southeast Regional Groundwater Management Planning group and provided coordination, planning and advisory support to the 54 participating agencies completing the management plan.
- As part of the Red River Basin Commission's Communications Committee, assisted with the organization of the Commission's 26th annual conference in Fargo, North Dakota.
- As part of the Partners FOR the South Saskatchewan River Basin's Saskatchewan River Delta Technical Working Group, assisted with the organization of the Delta Conference in Saskatoon, Saskatchewan.
- Provided advisory and planning assistance to the Assiniboine Delta Aquifer and Winkler Aquifer Management Advisory Boards.
- Coordinated the review of 958 development related proposals (summarized below) to minimize negative effects on water resources.

<i>Development Proposals Processed</i>	<i>#</i>
Environment Act and Dangerous Goods Handling and Transportation Act Proposals and draft licenses	134
Subdivision applications	709
Development plans and zoning by-laws	87
Manitoba Infrastructure and Transportation pre-screenings	7
Energy and Mines proposals	9
Special projects	12
Total	958

Information and Knowledge Management:

This Section establishes and manages cross-cutting departmental work teams to provide leadership, innovation, coordination and integration of the department's information and knowledge systems. Activities

include coordination and facilitation services to identify information and knowledge gaps and appropriate solutions. Leadership to facilitate integrated departmental solutions is provided to ensure the accurate and timely collection and dissemination of information and knowledge of a scientific, technical, and policy nature to support the department. This Section also provides leadership and coordinates the department's activities related to capacity building, education and information dissemination.

Key Results Achieved:

- Collaborated with Natural Resources Canada in the production of a geospatial hydrography data model that synthesizes key concepts of hydrography and hydrology in description of surface water systems. This model supports various types of applications such as cartographic representation and data analysis, and facilitates more effective watershed management, planning and environmental impact assessment by department staff.
- Managed the Watershed MAPS Project - the development of Watershed MAPS (a GIS-enabled, web-based information management, planning and reporting system) allows water planning authorities and other stakeholders involved in watershed planning and management, access to a tool designed to meet their watershed planning and priority setting need through the tracking of: indicators that gauge watershed health, management practices, and project effectiveness.
- Represented Manitoba Water Stewardship on national advisory committees [GeoConnections Program and the National Land and Water Information Service]. These national advisory committees function to improve public access to geospatial information and programs and services. Departmental representation on these committees has facilitated an integration of Water Stewardship's program requirements with other agencies to allow for a leveraging of outside resources in support of departmental goals.
- Managed the FOCUS Initiative and its implementation within Manitoba Water Stewardship to better align departmental resources for delivery on key priorities.
- Facilitated the development of systems and procedures to standardize technologies, and information storage, search and retrieval.
- Continued to provide development and support services for knowledge distribution including internet home page administration and coordination.

Policy and Legislation:

This Section is responsible for:

- coordinating the review, amendment and development of legislation, regulations and policy required to support the sustainable management of Manitoba's water resources;
- coordinating the Estimates Book and House Briefing Book;
- coordinating the departmental planning process;
- coordinating correspondence;
- providing secretariat and policy support to the Manitoba Water Council;
- coordinating the development of briefing materials and providing policy support on water issues for the Federal/Provincial Relations Branch (Council of the Federation, Western Premiers Conference) and other information requests of a national or international basis;
- providing representation for the department on intergovernmental bodies, and external agencies, boards and committees;
- coordinating the Water Stewardship Fund.

Key Results Achieved:

- Water Soft Paths Project - Manitoba Water Stewardship contracted the International Institute for Sustainable Development to conduct a 2030 Manitoba Water Visioning Sustainability study. In the second year of this three-year study, International Institute for Sustainable Development delivered a draft document outlining a sustainable water vision as seen through the Water Soft Paths lens.

- Beneficial Management Practice Top Up Incentive Program - Manitoba Water Stewardship completed the final year of a Contribution Agreement with Agriculture and Agri-Food Canada (AAFC/PFRA) to deliver a top-up incentive program to qualified landowners to select from three BMPs that would positively influence water quality.
- As part of the organizing committee, organized the Canadian River Heritage Conference in June 2007, which attracted over 150 national and international delegates. The conference discussed water issues from a recreational, heritage and natural perspective and also celebrated the designation of the Red River as a Canadian Heritage River – the first prairie river to be included in the system.
- In May 2007, organized, with Manitoba Agriculture, Food and Rural Initiatives, a meeting and one-day workshop on ecological goods and services with keynote speaker and guest, Gary Stoneham. Mr. Stoneham is the Chief Economist with the Australian Department of Sustainability and Environment and plays a leading role in developing the use of market-based instruments for allocating scarce resources in natural resource management. Approximately 100 people from across Manitoba participated in the workshop.
- As part of the organizing committee, organized the National Workshop on Watershed Conservation, a national workshop on a watershed approach to conservation. The workshop, which attracted approximately 100 participants from across Canada, discussed issues related to this approach to conservation.
- Riparian Easements Program - a grant of \$300.0 was provided to Manitoba Habitat Heritage Corporation to secure, in perpetuity, conservation easements from landowners.
- Provided secretariat and advisory services for the Manitoba Water Council. The Water Council was formally established in February 2007 and will provide Ministerial advice on policies, programs, plans, and legislation needed to achieve the department's vision, mission and guiding principles. The Council will help build a broad-based consensus among Manitobans on sustainable solutions to water protection and water management.
- Assisted branches within both divisions of the department with the development of documents for Treasury Board, Cabinet, Ombudsman and the Auditor General.
- Assisted the Office of Drinking Water in the review of existing and the development of new policies and guidelines.
- Managed the Water Stewardship Fund that was established under Part 3, Section 29, of *The Water Protection Act* and has been financed by a \$350.0 annual allocation from the Sustainable Development Innovations Fund. All information on the Fund, including an application form and brochure, is posted to a user-friendly website under the department's main site.
- Funding requests were received by the Water Stewardship Fund and reviewed by staff. Email enquiries and telephone calls were answered to provide information on the Fund and guidance to proponents. The Fund was fully allocated and grants were provided to nineteen organizations. The successful projects encompass a wide range of community groups and scientific organizations and cover all of the priority areas identified in the Water Stewardship Fund funding guidelines. For more information on these projects and the grant levels, please see the Sustainable Development Innovations Fund Annual Report 2007/08.

Watershed Planning and Programs:

The section provides secretariat services to the Conservation District Commission, the governing body responsible and accountable to the Minister of Water Stewardship for overall conservation district program management and administration under the authority of *The Conservation Districts Act*. The section also manages and provides advisory and planning services to the conservation districts Program and coordinates community-based watershed management planning in Manitoba as mandated by *The Water Protection Act*. Activities include formation of new conservation districts, expansion of existing conservation districts, facilitating watershed management planning, capacity building to promote effective Conservation District Board governance, coordination of provincial services and administration of conservation district budgets, provincial grant funding, and provincial policy.

Key Results Achieved:

- Regionalized and staffed offices in Neepawa, Winnipeg, Brandon, Dauphin and Steinbach to improve client service interaction, program delivery and fiscal efficiencies.
- Conservation District Commission Deputy Ministers participated in workshops to develop a draft Conservation District Program - Framework for the Future discussion document outlining a vision, mission, goals, objectives, provincial priorities, and potential new funding formula.
- The Conservation District Program - Framework for the Future discussion document presentations were held at 25 community locations to review and solicit stakeholder comments.
- Coordinated the expansion activities of the Seine-Rat River Conservation District to include the Rural Municipality of Stuartburn, East Interlake Conservation District to include the Rural Municipality of St. Andrews, Alonsa Conservation District to include two communities under the jurisdiction and authority of Manitoba Aboriginal and Northern Affairs and finalized a merger proposal between Tiger Hills and Mid Assiniboine River conservation districts including expansion into the rural municipalities of Whitewater, Riverside and Oakland and the Village of Wawanesa.
- Coordinated and developed the West Interlake Watershed Conservation District formation proposal with six rural municipalities.
- Provided support services to 18 conservation district boards and staff including all aspects of governance, budgeting, policy development, programming/operations, planning and human resource services.
- Continued work on the Icelandic River/Washow Bay, La Salle River, Seine River, Arrow/Oak River, Little Saskatchewan River, Shell River and Birdtail River watershed plans as required by *The Water Protection Act*.
- Initiated a series of workshops on capacity-building focusing on governance, water management, and roles of provincial appointees on conservation district boards.
- Coordinated Conservation District Commission meetings, updated and administered new budget policy to conservation districts, and finalized conservation district program annual audit for the Office of the Auditor General.
- Acted in extension and advisory capacity to the Manitoba Conservation Districts Association, the Association of Manitoba Municipalities, and other partner agencies.
- Initiated, developed and managed the Capital Investment Initiative Program, a long term capital investment providing financial resources to the four conservation districts that manage and maintain provincially owned waterway infrastructure. The Capital Investment Initiative is a \$600.0 annual allocation requiring multi-branch and department interaction with Manitoba Water Stewardship, Manitoba Infrastructure and Transportation, and Manitoba Conservation, coordinated in conjunction with the Water Control Systems Management section.
- Coordinated the development and printing of the Annual Report containing the activities and expenditures of all 18 conservation districts. For more information on these reports, projects and grants, please see the Conservation Districts of Manitoba Annual Report 2007/08.

Table EC.2
25.2(b) Planning and Coordination

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	1,291.9	23.00	1,563.2	(271.3)	1
Other Expenditures	419.8		390.8	29.0	
Total Sub-Appropriation	1,711.7	23.00	1,954.0	(242.3)	

1. Under expenditure is due to vacancies in the branch.

Water Science and Management - Administration

The Water Science and Management Branch consists of over 30 scientific and technical personnel including hydrologists, limnologists or aquatic biologists, hydrogeologists, and support staff to provide services in the following main areas:

- managing and protecting the quality and quantity of ground water and surface water including beach water quality;
- providing hydrological scientific services to support the sustainable use of surface water, to assure the protection of people, and to minimize damage to property from floods and droughts;
- protecting the biological and ecosystem health of Manitoba's water systems including programs aimed at preventing the introduction of invasive species;
- managing transboundary water issues that may have potential to affect the quality or quantity of waters that flow to Manitoba from upstream jurisdictions;
- developing and implementing programs aimed at restoring the health of Lake Winnipeg.

The Branch is organized into three sections: Groundwater Management Section, Surface Water Management Section, and the Water Quality Management Section. Services are provided to the public, local governments, other units within the department, other Manitoba provincial government departments, and other provincial, federal, and international governments. The Water Science and Management Branch delivers strong scientifically-based programs to ensure Manitoba's water resources and environment are managed and protected in a sound and sustainable manner including the protection of human health and property.

The Branch is represented on numerous inter-departmental, provincial, national, and international boards and committees including the following:

- Lake of the Woods Control Board
- Red River Floodway Operation Advisory Board
- Shellmouth Operation Advisory Board
- International Joint Commission - International Souris River Basin Board
- International Joint Commission - International Red River Board
- Red River Basin Commission
- Prairie Provinces Water Board - Hydrology Committee
- Prairie Provinces Water Board - Water Quality Committee
- Prairie Provinces Water Board - Groundwater Committee
- Canadian Council of Ministers of the Environment - Water Quality Committee
- Canadian Council of Ministers of the Environment - Canada-wide Strategy for the Management of Municipal Wastewater Effluent
- Canadian Council of Fisheries and Aquaculture Ministers - Task Group on Aquatic Invasive Species
- Lake Winnipeg Stewardship Board
- Lake Manitoba Stewardship Board
- Federal-Provincial Lake Winnipeg Basin Committee
- Lake Winnipeg Basin Science Sub Committee

- Working Group on Canadian Recreational Water Quality Guidelines

Activities across the Water Science and Management Branch in 2007 - 2008 included the following:

Activity	Number
Reviewed proposals for livestock operations	3
Reviewed proposals for drainage or culvert Water Rights licences	18
Reviewed proposed development plans, by-laws and subdivisions	135
Reviewed proposals for sale or lease of Crown lands	265
Reviewed proposals for highway culverts, bridges, etc.	10
Reviewed proposals and draft licences under <i>The Environment Act</i> , plans for mine closures, pipelines and Canada-Manitoba Infrastructure projects	141
Reviewed proposals for funding under the Sustainable Development Innovations Fund and the Water Stewardship Fund	21

- Technical and administrative assistance was provided to the development and implementation of the Nutrient Management Regulation, passed on March 18, 2008. The purpose of the regulation is to protect water quality by encouraging responsible nutrient planning, regulating the application of materials containing nutrients and restricting the development of certain types of facilities in environmentally sensitive areas.
- Consultations were undertaken on proposed approaches for reducing nutrient contributions from urban and rural residential areas including lawn fertilizers and cleaning products (e.g., automatic dishwashing detergents). New, first in Canada, legislation to limit the phosphorus content in cleaning products was introduced. An amendment to the Nutrient Management Regulation was proposed to restrict the phosphorus content in fertilizers used in urban and rural residential areas.
- Continued to provide support to Manitoba to intervene in projects that pose a threat through the potential introduction of foreign biota to Manitoba waters. These include projects such as operation of the Devils Lake outlet and diversion of Missouri River water to the Hudson Bay basin via the Northwest Area Water Supply and the Red River Valley Water Supply initiatives.

Table EC.3

25.2(c).1 Water Science and Management - Administration

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	252.8	3.00	209.3	43.5	1
Other Expenditures	121.2		167.5	(46.3)	2
Total Sub-Appropriation	374.0	3.00	376.8	(2.8)	

1. Over expenditure is due to severance and vacation payouts for retirements in 2007/08.
2. Under expenditure is due to lower operating expenses than anticipated as a result of retirements.

Water Science and Management - Groundwater Management

The Groundwater Management Section is responsible for evaluation, monitoring and protection of the province's groundwater resources. Major activities include administration of *The Ground Water and Water Well Act*; studies to map the occurrence and quality of groundwater; monitoring groundwater quality and water levels, and storing this information in data bases; evaluating the sustainable development capacity of aquifers, and carrying out studies to assess the potential for water quality impacts from various anthropogenic activities.

Key Results Achieved:

- Thirty firms were licenced under *The Ground Water and Water Well Act* to drill water wells in Manitoba with liaison between the well drilling industry and government provided by regular visits and communication with the Well Drilling Liaison Officer.
- Approximately 1,200 reports were submitted for new water wells or test holes that were drilled and for approximately 200 abandoned water wells that were sealed by water well drillers and other organizations.
- Monitoring of water levels was continued within the provincial groundwater monitoring network of approximately 600 dedicated wells. Monitoring wells are located to observe background information and stresses due to groundwater development. Groundwater quality information was also obtained from many of the monitoring wells. Groundwater temperatures were monitored in 25 wells in the City of Winnipeg to evaluate impacts from geothermal systems.
- The monitoring network was updated and modified as part of an ongoing comprehensive evaluation. Pumping tests, geophysical logging and water sampling were carried out on approximately 100 observation wells to characterize the response of the aquifers at these locations and provide information for groundwater sustainability evaluations. Thirty observation wells that had become redundant over the years were permanently sealed.
- Databases of groundwater levels, chemistry, water well logs, geophysical logs, aquifer properties and soil moisture/precipitation were maintained and updated. Licensed water well drillers and a number of consulting firms and private individuals were supplied with a copy of the complete water well records while partial records were provided in response to several hundred written and telephone requests. Considerable effort has been made to incorporate groundwater quality information reported in technical reports dating back to the 1930s.
- Groundwater mapping was undertaken in several parts of the province to support integrated watershed or aquifer management plans. Staff from the Section participated in seven watershed and four aquifer management projects that are either in the implementation or development stage.
- A test hole drilling program was completed in the Sandilands area of south-eastern Manitoba to gather detailed information on the geology and the occurrence of aquifers and aquitards. Eight test holes were drilled, with continuous core being collected to depths as great as 120 m. Several of the holes were completed as long-term monitoring wells.
- Detailed groundwater sampling was carried out in observation wells installed as part of the evaluation of aquifers in south-eastern Manitoba. Analyses will allow groundwater age dating to be carried out which will provide information on aquifer recharge rates and sustainable yield.
- Cooperation continued with the Geological Survey of Canada in using geophysical methods to map portions of several buried aquifers in south-western and south-eastern Manitoba.
- Staff provided support through geophysical logging and technical input to the sealing of a number of abandoned water wells in the province, including several deep wells in the Winnipeg area.
- Several hundred proposals and reports were reviewed where groundwater quality or quantity impacts had occurred or may occur because of development.
- Progress continued toward development of three-dimensional digital groundwater model of much of south-eastern Manitoba. Once developed, this model will be used in conjunction with monitoring and water quality information to evaluate the sustainable yield of the major aquifers in this part of Manitoba where groundwater is heavily utilized for water supply. An operational model is expected to be completed in early FY 2008/09.
- An assessment of the long-term groundwater level and water quality information for the Winkler aquifer was completed and a paper written and presented at a national groundwater conference in Ottawa.

- Groundwater maps and reports were completed for each of four watersheds in south-western Manitoba and provided to the planning groups responsible for developing watershed plans.

Table EC.4

25.2(c).2 Water Science and Management - Groundwater Management

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	881.7	14.00	901.3	(19.6)	
Other Expenditures	465.6		546.0	(80.4)	1
Total Sub-Appropriation	1,347.3	14.00	1,447.3	(100.0)	

1. Under expenditure is due to lower lab and isotope analysis costs for Groundwater Quality.

Water Science and Management - Surface Water Management

The Surface Water Management Section provides hydrological scientific services to support the sustainable use of surface water, to assure the protection of people and to minimize damage to property from floods and droughts. This is done through various activities, including the collection of hydrometric data and providing advice on the operation of control works and flood protection facilities. Planning and engineering studies are undertaken to guide water use, allocation and licensing decisions, to plan and design waterways, and to provide input to multi-disciplinary resource management activities. Hydraulic and hydrologic information is provided to the public. Advice for operations of dams is provided for water supply, conservation, flood control, fish and wildlife habitat, and recreation.

Key Results Achieved:

- Operated monitoring network to collect surface water levels on lakes and streams, as well as stream flows in partnership with the federal government.
- Provided input and advice on the sustainable supply of water available for allocation and for instream flows under *The Water Rights Act* and *The Water Protection Act*.
- Assisted in the preparation of an environmental assessment on additional flood mitigation and water supply enhancement measures for the Assiniboine River through modifications to the Shellmouth Dam.
- Provided advice on the operation of the Red River Floodway and other flood control works, including the operation of over 100 provincially owned dams.
- Collaborated on inter-jurisdictional, inter-provincial and international water issues.
- Work continued on the joint Canada - Manitoba flood protection project for the Fisher River. The main elements of the project involved completion of LiDAR (Light Detection and Ranging) surveys to accurately determine land and infrastructure elevations and the development of a MIKE-11 model to determine the causes and solutions to flooding problems along the Fisher River.
- Provided input to proposed development plans to minimize siting structures within flood prone areas.
- Assisted in the development of a model for the Assiniboine River in the City of Brandon to identify the 1 in 100 year flood risk areas.
- Provided hydrological support for the development of a number of integrated watershed management plans under *The Water Protection Act*.

- Developed discharges for design of waterways and waterway openings and to accommodate passage of fish for infrastructure planning, design and environmental approvals.

Activity	Number
Operation of stream flow and lake level gauging stations	114
Operation of stream flow and lake level gauging stations in partnership with the federal government under the Canada-Manitoba Agreement for Water Quantity Surveys	205
Hydrologic analysis of the sustainable supply of water available for allocation under <i>The Water Rights Act</i> or provided input to assessments	25
Design and fish passage discharges for Manitoba Infrastructure and Transportation and other sites	179

Table EC.5

25.2(c).3 Water Science and Management - Surface Water Management

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	576.0	9.00	689.1	(113.1)	1
Other Expenditures	168.5		166.5	2.0	
Total Sub-Appropriation	744.5	9.00	855.6	(111.1)	

1. Under expenditure is due to vacancies in the branch.

Water Science and Management - Water Quality Management

- The Water Quality Management Section assists in the protection, maintenance, and rehabilitation of Manitoba's water resources and environment. The Section provides leadership on various priority initiatives including Lake Winnipeg, provides scientific and technical input to multi-disciplinary watershed studies and activities, provides input to the development of legislation and policies including setting water quality standards, objectives, and guidelines, coordinates and conducts various monitoring activities, and provides input and advice on various proposals that may impact the quality of Manitoba's aquatic environment.

Key Results Achieved:

- Studies of *Escherichia coli* continued on Lake Winnipeg to identify the source of bacteria at beaches in the south basin. Studies have shown that large numbers of *Escherichia coli* are present in the wet sand of beaches. During some periods of high winds when water levels are rising in the south basin, these bacteria can be washed out of the sand and into the swimming area of the lake. Research has shown that less than ten per cent of the *Escherichia coli* at Lake Winnipeg beaches is from human sources, with the remainder being from birds and animals. Results significantly enhance the present understanding of water quality in Lake Winnipeg.
- Recreational water quality was monitored at 63 locations across Manitoba and timely results were provided to the public through the department's web site and weekly news releases throughout the bathing season.
- Support was provided to the Lake Winnipeg Stewardship Board and the Lake Manitoba Stewardship Boards to develop long-term actions to assist government in protecting Manitoba's two largest lakes.
- Support was provided to coordinate government's collective implementation of the Lake Winnipeg Stewardship Board's recommendations including through the Federal-Provincial Lake Winnipeg Basin Committee and the Lake Winnipeg Basin Science Sub-Committee.
- Programs were continued to prevent zebra mussel and other nuisance aquatic species from being introduced into Manitoba including the deployment of student inspectors to border crossings.

- The Water Quality Management Section collaborated with Environment Canada, Fisheries and Oceans Canada, the Lake Winnipeg Research Consortium and others to monitor Lake Winnipeg and conduct research to improve our understanding of nutrient and algae dynamics. The Section participated in three science cruises on *The Namao* and led the collection of winter samples on Lake Winnipeg.
- Long-term water quality data were collected from a network of stations across Manitoba including at a number of new stations established in 2007-2008. Water quality data were entered into provincial data bases and provided in response to written and telephone requests.
- The Canadian Council of Ministers of the Environment's Water Quality Index was calculated for 35 stations from the long-term water quality monitoring network for submission and publication in the federal government's annual Canadian Environmental Sustainability Indicators report.
- Updated mercury in fish consumption guidelines were developed and distributed to the public and stakeholders through a new brochure and the Manitoba Water Stewardship web site.
- Technical input was provided to assist in the development of a number of watershed plans including those for the upper Assiniboine River watersheds.

Activity	Number of Stations
Operation of long-term surface water quality monitoring stations throughout Manitoba. Up to 100 chemical parameters are analyzed routinely at all sites including nutrients, pesticides, metals, dissolved salts and minerals, general chemistry, and at certain stations, pharmaceuticals	66
Operation of routine water quality monitoring stations on Lake Winnipeg	14
Operation of ancillary water quality monitoring stations on Lake Winnipeg	42
Operation of site specific, issue-based water quality monitoring stations throughout Manitoba	35
Operation of water quality monitoring stations on Shoal Lake (source of drinking water for City of Winnipeg)	12
Monitoring beaches for recreational water quality and algal toxins	63

Table EC.6
25.2(c).4 Water Science and Management - Water Quality Management

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	576.2	10.00	674.5	(98.3)	1
Other Expenditures	634.6		780.4	(145.8)	2
Total Sub-Appropriation	1,210.8	10.00	1,454.9	(244.1)	

1. Under expenditure is due to vacancies in the branch.
2. Under expenditure is due to lower lab costs and other operating expenditures as a result of vacancies.

Fisheries Branch - Administration

Fisheries Branch ensures the sustainable development of Manitoba's fisheries resources. Management programs are developed to provide greatest benefits to Manitobans, by maintaining or enhancing populations and habitat, monitoring harvest and habitat alterations, and allocating resources for best return. The Branch directs and reports on programs and budgets, legislation and policy, standards and guidelines, and co-ordination and monitoring. The Branch also administers the Northern Fishermen's Freight Assistance Program. Head Office and Regional Fisheries Managers report to the Fisheries Director responsible for operational decision-making and program delivery.

The objective of the Branch is to direct effective branch operations through appropriate allocation of staff and budget, and by identifying management priorities and programs consistent with government policy and to develop and interpret branch policies to ensure consistency with sustainable development principles and guidelines.

Key Results Achieved:

- Branch annual planning process links regional and head office program delivery to the Branch Strategic Plan, which supports the department's Priorities and Strategies Overview document.
- Regulatory variances were prepared as required to address season opening and closing dates and quota adjustments for sustainability purposes.
- Initiated a review of fisheries governance to assure contemporary approaches to partnering and collaboration on management activities with key interest groups.
- Staff participated in professional training opportunities including conference attendance and a training workshop during the annual Branch meeting.
- Branch input provided to policy development in key areas, particularly Aboriginal consultation.
- User group involvement through integrated planning is a key principle in Branch planning and was highlighted this year with the establishment of the Fisheries Enhancement Fund Project Review Committee.
- Provided public education on priorities of fish resource allocation at every opportunity.
- Participated on the Interjurisdictional Working Group, Aquatic Invasive Species Task Group, Aquaculture Task Group, Species at Risk Task Group, and the Aquaculture Task Group reporting to the Canadian Council of Fisheries and Aquaculture Ministers, and the Freshwater Fisheries Committee and Recreational Fishing Committee reporting to the Interjurisdictional Working Group. These task groups and committees are working on priority national fisheries issues to develop policies and strategic actions to address challenges and opportunities collaboratively and facilitate administrative efficiency and effectiveness.
- Participated on the Task Group on Eco-certification established in November 2007 with the primary objective of developing a national strategy to support fisheries and aquaculture industries to respond to global demand in major seafood markets for third party certification ("eco-labelling"), indicating that fish were harvested from a biologically sustainable fishery.
- As a product of the recommended actions in the National Freshwater Fisheries Strategy approved by CCFAM a bilateral working group of Fisheries and Oceans Canada and Manitoba Water Stewardship officials was established to explore their mandates and relationship with a view to increased cooperation and coordination on freshwater issues, more efficient and effective program delivery, enhanced action on priorities of common concern and identification of areas of challenge and opportunity. Manitoba Water Stewardship and Fisheries and Oceans Canada have agreed to establish a Canada-Manitoba Fisheries Advisory Board as the governance structure for moving forward on bilateral cooperation that could lead to a Canada-Manitoba Cooperative Agreement.

Table FI.1**25.2(d).1 Fisheries Branch - Administration**

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	102.2	2.00	156.9	(54.7)	1
Other Expenditures	223.8		246.0	(22.2)	
Total Sub-Appropriation	326.0	2.00	402.9	(76.9)	

1. Under expenditure is due to vacancies in the branch.

Fisheries Branch - Aquatic Ecosystem Management

The Section supports conservation, evaluation, restoration, and enhancement of fish and aquatic ecosystems to achieve a net gain in healthy, productive fish stocks. The objective of the Section is to develop, co-ordinate and evaluate an aquatic ecosystem program that supports the sustainability of aquatic ecosystems, and enhances, restores and develops fish habitat providing the potential for the habitat to sustain fish resources and the benefits that they provide Manitoba.

Key Results Achieved:

- A total of 573 development proposals were reviewed:
 - sixty-three proposals were reviewed under *The Environment Act*. Proposals included, but were not limited to, water treatment plants, wastewater treatment lagoons, water supply projects, irrigation projects, fertilizer storage, sewage treatment plants, pork and beef processing facilities, and bridges.
 - forty-three draft licenses (an increase of 38 from 2006/07), eight pre-licensing environmental screening proposals and two environmental impact assessments were reviewed.
 - an additional 457 proposals not requiring review under *The Environment Act* but having potential implications for aquatic ecosystems were reviewed. These included, but were not limited to, Crown lands sale/lease/permit applications, and municipal development plans/amendments/ zoning bylaws. This was an increase of 153 (50 per cent) from 2006/07.
- Issued 57 scientific collection, 17 live fish handling, and eight export permits.
- Co-chaired the Drain Maintenance Guidelines Committee with Fisheries and Oceans Canada tasked with developing guidelines that ensure all drain maintenance resource interests are recognized/ accommodated. Draft Agricultural Drain Classification maps were approved and returned from the federal government. All documents are being translated into French and Fisheries and Oceans Canada is developing an implementation and stakeholder engagement plan.
- Continued monitoring programs, as part of the Environmental Effects Monitoring Program, of two pulp and paper and ten mining effluent proposals/programs. Environmental Effects Monitoring Program is required by regulation under *The Fisheries Act (Canada)*.
- Participated on the Forest Practices Committee, updating and developing Forest Management Guidelines, and published the Forest Management Guidelines for Riparian Areas in July 2007.
- Participated on the Technical Advisory Committee for Manitoba Hydro's Environmental Management Plan for the former manufactured gas plant.
- Participated on the Manitoba Floodway – Fisheries Technical Experts Committee:
 - the final report of the fish passage concept study at the inlet control structure was completed. Report recommendations will require further evaluations (Phase 2 of the study);
 - a fish inventory and movement study was completed on the Red River, upstream and downstream of the inlet control structure. A final report is in preparation;

- a request for proposals for a habitat compensation options study for floodway works was prepared and a consultant was selected to implement the deliverables.
- Provided the Brokenhead Restoration Committee with a fish passage monitoring design to determine fish passage success for a fishway project.
- Initiated an Instream Flow Needs Program to address instream flow needs for the protection of aquatic ecosystem health. This program is intended to meet the legislated responsibilities detailed in *The Water Protection Act*. Noteworthy initiatives include:
 - an instream flow needs biologist was hired to develop and lead this new program;
 - a study of the Little Saskatchewan River began in Fall 2007;
 - a process to prioritize streams for instream flow needs study was initiated to provide direction on meeting the departmental objective of completing five instream flow needs studies by 2012.
- Completed the first draft of the Assiniboine River instream flow needs study report.
- Conducted an assessment by the Introductions and Transfers Committee on a request to import Australian red claw crayfish for the purpose of an aquaculture feasibility study.
- Completed an operational guideline document for the Manitoba Introduction and Transfers Committee.
- Provided further amendments to the Prohibited Species List of the Manitoba Fisheries Regulations under *The Fisheries Act* to Fisheries and Oceans Canada.
- Reviewed and provided status recommendations on 21 fish status reports for the Status of Endangered Wildlife in Canada (COSEWIC). One Manitoba species, the northern brook lamprey (Saskatchewan Nelson River Designatable Unit), was included in the assessment and a recommendation of "not at risk" was endorsed by COSEWIC.
- Completed investigations on Falcon Lake that confirmed presence of rusty crayfish:
 - printed and distributed 5,000 rusty crayfish fact sheets to Falcon Lake cottage owners and campers;
 - printed and distributed 6,000 aquatic invasive species information brochures for boaters.
- Participated on the Canadian Council of Fisheries and Aquaculture Ministers Aquatic Invasive Species Task Group. The task group was sunsetted in November 2007 and a National Aquatic Invasive Species Committee has been established under Canadian Council of Fisheries and Aquaculture Ministers to carry out the implementation strategy developed by the task group. The committee has begun investigating regulatory framework, risk assessment, early detection, and rapid response models.
- Coordinated the implementation of a fish passage study at the Fairford River dam based on the Terms of Reference submitted by the Lake Winnipegosis Management Board. The study is to determine whether fish passage is impeded, and if further enhancement of the facility is required. The Fairford Fishway Working Group was formed and consists of local commercial fishers and provincial and federal government representatives. In fall, fish species composition, abundance and size were assessed upstream and downstream of the dam, and any movement of fish past the dam was documented. A build-up of debris at the entrance and exit likely prohibited access to the fishway. Following debris removal, the size and fish species captured suggested conditions in the fishway were likely not limiting passage. A second, separate contract was developed to conduct a hydraulic analysis of a conceptual fishway that was conducted at the University of Manitoba Hydraulics Research and Testing Facility. Results demonstrated that water velocities at the fishway exit would pose a velocity barrier to fish passage under the majority of operating conditions.
- Enhanced the sustainable development education website with 14 more classroom activities to further integrate sustainable development concepts into the new Kindergarten to Grade 4 Manitoba Science Curriculum. The site was promoted at Manitoba Education workshops, seminars and conferences (including the provincial Special Area Group Science conference), and educational institutions throughout the province. The site provides educators and students with on-line fisheries information and grade-specific exercises to meet prescribed outcomes.

Fish Culture:

- The Fish Culture Section operates fish hatcheries for the distribution of fish fingerlings and fry to meet requirements for commercial, sport fish and conservation stocking in Manitoba.
- A total of 77.2 million walleye were stocked. Of those, 54.2M were marked with oxytetracycline and stocked into five commercial fishing lakes, 41.1M of which were stocked into Lake Manitoba;
 - 23M stocked into 147 sport fishing lakes
 - Trout stocked – 383,000
 - Sturgeon stocked – 500

Table FI.2
Distribution to Sport Fishing Waters from Fish Hatcheries

Species	Fry	Fish <18cm fingerlings	Fish ≥ 18cm yearlings	Total
Brook x Brown Hybrid	0	12,500	0	12,500
Brook x Lake Hybrid	0	0	0	0
Brook Trout	0	90,000	0	90,000
Brown Trout	0	58,000	2,250	60,250
Rainbow Trout	0	154,500	65,765	220,265
Total Trout	0	315,000	68,015	383,015
Walleye*	23,000,000	0	0	23,000,000

*does not include stocking to commercially fished lakes

Key Results Achieved:

- Provided technical assistance to Lonely Lake Walleye Hatchery.
- An estimated 2,980 people visited the Whiteshell Hatchery Interpretive Centre.
- The transfer of the ownership of Grand Rapids Hatchery from Manitoba Water Stewardship to Manitoba Hydro was completed on November 1, 2007. A Joint Management Committee was formed of Fisheries Branch and Hydro representatives to direct all programs and planning at the hatchery.
- Participated in the Manitoba Envirothon by co-chairing the test writing committee. This year, the competition was held in Pinawa with 34 Manitoba school teams entered.
- The Stocking and Fisheries Inventory and Habitat Classification System (FIHCS) applications in the FISHin corporate database were updated. STEP students entered data from fisheries research reports into FIHCS, and stocking data was entered and an annual stocking list was generated.
- Provided technical assistance in Geographical Information Systems, aerial photography, database querying, stocking updates and computer operation issues related to a variety of projects (e.g., bait blocks, stocking, stream habitat enhancements).

Table FI.3**25.2(d).2 Fisheries Branch - Aquatic Eco-System Management**

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	1,076.9	21.19	1,144.6	(67.7)	1
Other Expenditures	186.6		191.8	(5.2)	
Total Sub-Appropriation	1,263.5	21.19	1,336.4	(72.9)	

1. Under expenditure is due to vacancies in the branch.

Fisheries Branch - Sport and Commercial Fishing Management

The Section develops, administers, and evaluates management programs and policies for sport, commercial, and domestic use, including commercial bait fishing and trout farming. It also manages the Northern Fisherman's Freight Assistance Program, distribution and reconciliation of commercial fishing licences, and fish production information. The objective of the Section is to develop and evaluate the recreational, commercial and domestic fisheries management programs in an integrated manner that ensures sustainability of the resource and maximizes benefits from its use.

Key Results Achieved

- As a part of Manitoba's delegated role of administering federal government regulations, amendments necessary for the proper management of Manitoba's fisheries resource were completed and forwarded to Fisheries and Oceans Canada for inclusion in Manitoba's Fisheries Regulations (1987).
- For the major commercially fished lakes in Manitoba, employment and production statistics are provided in reference tables FI.8, FI.9 and FI.10.
- In partnership with Fish Futures Inc., published the 2008 Manitoba Anglers' Guide that summarizes angling regulations, highlights new and proposed regulations, and includes management and other information. Anglers and user groups continued to play an important role in developing regulations and attention is focussed on simplifying regulations without diminishing conservation.
- Coordinated Winnipeg's Urban Angling Partnership, comprised of Manitoba Wildlife Federation, Fish Futures Inc., Mid-Canada Marine Dealers Association, The Complete Angler, City Cats, City of Winnipeg and Government of Manitoba. Urban Angling Partnership offers residents and visitors recreational angling opportunities through structured programs, including Learn to Fish Clinics, Winnipeg Fish Festival, Youth Angling Camps, Fish Winnipeg Media/Corporate Challenge (monies raised for youth angling programs) and Urban Fall Fishing Derby. The program's goal is to encourage participation in recreational fishing and address declining angling licenses sales (refer to Table FI.11).
- Discontinued the three-inch perch fishery, as part of the department's commitment to the rehabilitation Lake Winnipegosis walleye stocks; supporting efforts to help address walleye recruitment challenges and assist in the long-term recovery towards a sustainability fishery.
- Continued consultations with West Region Tribal Council to develop co-management fisheries approaches for Dauphin Lake, including a cooperative one-year trap net pilot project on tributaries of the lake. The Department's goals are to ensure that infringement of constitutionally protected treaty rights are minimized, fish stocks are conserved through innovative approaches that reduce impacts to spawning fish, and build capacities by providing training opportunities.
- A Manitoba Special Dealer's License issued by the Freshwater Fish Marketing Corporation permits the licensee to purchase fish from licensed commercial fishers in the Province of Manitoba and to sell this fish within the Province of Manitoba to fish consumers or to restaurants and retail outlets for consumption in

Manitoba. Thirty-seven Special Dealers Licenses were issued from May 1, 2007 to April 30, 2008 with 149,922 kilograms (330,516 pounds) of fish sold within Manitoba. The species percentage was:

pickerel	79%
whitefish	8%
goldeye	4%
others (perch, tullibee, catfish, mullet, pike, silver bass, pickerel cheeks)	6%

- The bait industry (consisting of commercial bait fish fishers and leech harvesters) had estimated gross sales of \$877,020. Fifty-two live bait dealer licences were issued, allowing retail sale of live bait fish and leeches. For statistics related to the bait fishing industry, please refer to table FI.12.
- Reviewed existing fisheries governance structures to examine alternative approaches to fisheries management practices. Changes in resource user interactions, the need for new co-management approaches, and challenges facing socio-economic, cultural and resource allocation issues require new and innovative decision-making processes to meet client demands.
- Participated on the National Eco-Certification Task Group established under the Canadian Council of Fisheries and Aquaculture Ministers to address increasing demands from global markets to purchase fish and seafood from biologically sustainable fisheries resources. In response to increasing consumer demands and seafood buyer's eco-labeling requirements, the Branch began reviewing and investigating certification processes to ensure that Manitoba is positioned to meet present and future industry demands.
- Continued the trawling monitoring program, in cooperation with the Lake Winnipeg Research Consortium and Fisheries and Oceans Canada, on the Namao research vessel to assess relative abundance and distribution of fish species in Lake Winnipeg.
- Working in partnership with the Manitoba Wildlife Federation and Manitoba Recreation Connections, Manitoba's Recreational Fishing League completed another successful season. The league is designed to provide a community based youth angling program, re-connect youth with the environment around them, and build life coping and self-esteem skills for the future. Over 100 youth participated in the league that ran over a six-week period.
- Last year, Manitoba Water Stewardship and the Manitoba Commercial Inland Fishers Federation (MCIFF) introduced the "Long Service Fisher Award" which recognizes the contributions of commercial fishers to Manitoba's social and cultural foundations and economic well-being and who have been involved in commercial fishing for 50 years or more. In conjunction with the Long Service Fisher Award, MCIFF, in partnership with Manitoba Water Stewardship, also created an Exceptional Contribution Award to recognize certain individuals from their organization who have made notable, life-long contributions to Manitoba's commercial fishing industry. This year, twenty-seven Long Service Fisher Award plaques and four Exceptional Contribution Awards plaques were distributed.
- There were 31 licensed fish farmers and about 350 hobby farmers in private waters (refer to Table FI.13). Three major operators (all brokers/importers with one also producing their own fingerlings) distribute fingerlings to hobby farmers each spring. Five fee-for-fishing operations, where customers pay to fish in privately-stocked ponds or Crown waters, generally provide easy access to fishing from shore and are ideal for small children and individuals otherwise unable to angle.

Table F1.4
25.2(d).3 Fisheries Branch - Sport and Commercial Fishing Management

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	594.1	10.00	628.6	(34.5)	
Other Expenditures	74.6		78.2	(3.6)	
Total Sub-Appropriation	668.7	10.00	706.8	(38.1)	

Fisheries Branch - Regional Fisheries Resources

The objective of the Regional Fisheries Resources Section is to deliver fisheries programs at a regional level and to assist in the development and management of related provincial programs; to ensure the maintenance of healthy aquatic ecosystems for the use and well being of present and future generations of Manitobans; to provide input to compliance priorities and to assure the maintenance of long-term sustainability of fisheries resources; and to ensure an effective consultation role on behalf of the branch with all fishers.

Key Results Achieved:

All Regions

- Participated in drafting a pilot program for aquatic monitoring in cooperation with Manitoba Hydro as per the Manitoba and Manitoba Hydro Memorandum of Understanding about LWR/CRD monitoring activities. Activities included a workshop on methodology with participants from Hydro, Manitoba, Canada and consultants. The pilot program will set common methodology for monitoring activities throughout Manitoba with field testing scheduled for 2008/09. The objective is to share data and resources to produce a broad scale, long term monitoring program for the waters affected by hydroelectric development.

Northwest Region

- Co-chaired the Cedar Lake Resource Management Board and provided input to the new Opaskwayak Cree Nation Resource Management Board.
- Assisted with the planning and organization of the Saskatchewan River Delta Symposium held in Saskatoon. Attended this symposium and delivered a presentation on Cedar Lake Fisheries Management in the lower delta.
- Planned and coordinated trout stocking in the region.
- Reviewed and provided recommendations to Licensing Advisory Committee on applications for outcamps, boat/motor and fuel caches and other resource related tourism facilities. In conjunction with Manitoba Conservation, reviewed applications for commercial fish camps, recreational cabins and other facilities.
- Reviewed and provided comments for environmental proposals, in particular, proposals for exploration and short-term mining operations near Snow Lake and Tolko forest harvesting plans and operations.
- Commercial fishing licenses, bait fishing licenses and fish farming licenses were issued in conjunction with Manitoba Conservation region and district offices.
- Cedar Lake index netting was completed (refer to Table F1.14), an annual requirement of the Cedar Lake Fishery Management Plan. Analysis showed a continued recruitment of young walleye (two, three and four

year olds) into the population and slightly improved catch per unit effort (CUE). A commercial sample of 250 walleye was also obtained.

- Wekusko Lake index netting was completed (refer to Table F1.14), a semi-annual requirement of the Wekusko Lake Management Plan (i.e., every second year). Due to unexpectedly good catches, 472 walleye were sampled from the index nets. CUE increased tremendously over past years, suggesting that management efforts have achieved positive results.
- Co-chaired the Saskatchewan River Sturgeon Co-management Board. Under the authority of this Board, Manitoba conducts a sturgeon tagging project on the Saskatchewan River, with the assistance of four local fishers. Seventy-eight sturgeon were tagged and seven were recaptured from previous years.

Northeast Region

- Participated in the Norway House Resource Management Board along with regional Conservation and Aboriginal and Northern Affairs staff and four other resource management boards in the region. The purpose is to represent Manitoba on the Boards fulfilling the obligations of specific agreements and to develop meaningful relationships with Aboriginal communities and resource users.
- Participated in the Southern Indian Lake Environmental Monitoring Committee with representatives from the First Nation, commercial fishers and Manitoba Hydro. This ongoing Committee works to address environment issues on Southern Indian Lake arising from Hydro development. Annual monitoring of whitefish stocks continues and stocks appear to be in good condition with no indication of year class failures. Walleye stocks continue to remain low for a lake of this size.
- Continued last year's efforts and evaluated the Gauer River as a potential source of walleye spawn in a remote river for use in rehabilitation efforts. Walleye were present, but spring weather conditions were not suitable for spawning, and additional work will be required to validate these sites.
- Participated in the Nelson River Sturgeon Board (NRSB) and managed their field program. Field operations were limited by continuing high water levels and flows on the Nelson River. The Board obtained grant funding from the Federal Habitat Stewardship Fund and Aboriginal Funds for Species at Risk, significantly increasing its budget for field studies and outreach. The Board operates a continuing program to raise sturgeon fingerlings. This year approximately 1,000 sturgeon were hatched at Grand Rapids Hatchery and raised to fingerling size. For the first time, 500 were retained at Grand Rapids Hatchery and over-wintered on a warm water recirculating system. The Nelson River Sturgeon Board operates a rearing facility at Jenpeg where the other 500 were raised for two months prior to stocking into the Nelson River.

Eastern Region

- Participated on the Technical Advisory Committee for the Seine River integrated watershed planning process. A draft plan has been prepared and presented to the public for review. This is the first watershed plan for the region under the department's watershed planning initiative.
- Completed all regional trout stocking and updated the three year regional stocking plan and trout requirement projections. The stocking program is a key component of the regional fisheries program and provides angling diversity for a wide variety of users, both local and visitors.
- Completed reviews of regional environmental licensing proposals, land use applications, resource allocation requests, development proposals, and scientific collection permit applications.
- Completed the annual Winnipeg River sturgeon monitoring program. This program has been in place since the early 1990s and information gathered is critical to the long-term management of lake sturgeon, currently recommended by the Committee on the Status of Endangered Wildlife in Canada for listing as endangered under the federal *Species at Risk Act*.
- Participated with the Fisheries and Oceans Canada on monitoring and public education relative to aquatic invasive species. Continued to increase contact with regional fisher groups and competitive fishing event

organizers towards implementing more efficient methods to reduce fish handling at derbies and tournaments.

- Received funding through the Fisheries Enhancement Fund for a walleye population assessment program in Falcon Creek.

Central Region

- Co-chaired meetings of the Lake Winnipeg Commercial Fisheries Management Advisory Board. The Lake Winnipeg Commercial Fisheries Management Advisory Board, comprised of two co-chairs and commercial fisher representatives from 12 community areas around Lake Winnipeg, provides commercial fishers and government agencies with an opportunity discuss and develop policies for the Lake Winnipeg commercial net fishery.
- Attended commercial fishing meetings in communities around Lake Winnipeg. Community meetings represent a critical communication link between the Branch and stakeholders. These meetings provide an opportunity to deliver and receive information to/from communities around the lake.
- Participated in the regional Integrated Resource Management Team and Block Planning Committee (BPC).
- In cooperation with the Manitoba Commercial Inland Fishers Federation and local cottage and recreational users, established a committee and response strategy to address "lost" commercial nets on Lake Manitoba.
- Participated on the Technical Advisory Committees for the LaSalle River and Icelandic River/ Washow Bay Creek that developed draft integrated watershed management plans in 2007.
- Revised and implemented the annual regional stocking plan for walleye and trout. The stocking program is a key component to many of Central Region's recreational and commercial fisheries.
- Reviewed and provided comments on environmental licensing proposals, Crown land sales, scientific collection permits.
- Issued commercial and recreational fishing licenses, commercial bait fishing licenses, and fish farming licenses. Numerous competitive fishing event permits were issued for fishing derbies and tournaments throughout the region.
- Reviewed and made recommendations on allocation requests through the Licence Advisory Committee (LAC) process.
- Completed annual stock assessment, including index netting (refer to Table F1.14) and commercial sampling, on Lakes Winnipeg and Manitoba. Lakes Winnipeg and Manitoba represent two of Manitoba's largest commercial net fisheries. Stock monitoring on these two large lakes are a key component to Central Region's annual assessment activities.
- Conducted index netting and dissolved oxygen testing on Chitek Lake. Approximately 22 licenced commercial fishers harvest walleye in Chitek Lake during the winter. Historically, this lake has winter killed due to very low dissolved oxygen. Central Region fisheries in conjunction with Gypsumville District have been monitoring dissolved oxygen levels during critical winter periods.

Western Region

- Discussions continued regarding the draft management plan for Dauphin Lake with West Regional Tribal Council Resources Management Office. Annual index netting shows the walleye stocks of Dauphin Lake to be in a healthy state. Additional collaboration and consultation with West Regional Tribal Council and other Bands using Dauphin Lake is required to refine the current conservation measures and gain acceptance of the plan within First Nation communities.
- Regional staff acted in an advisory capacity to eleven conservation districts in the region. Participated on the Technical Advisory Committee for the integrated watershed planning process for the Shell River

Watershed, Assiniboine-Birdtail Watershed, Arrow-Oak River Watershed and the Little Saskatchewan River Watershed.

- Closure of the three-inch perch fishery on Lake Winnipegosis was an important step in the long term recovery and management of walleye stocks in Lake Winnipegosis.
- Assisted Intermountain Sport Fish Enhancement with the operation of the Methley rearing ponds. Pybus and Corstophine Lakes were developed as aerated stocked trout waters with Fish and Lake Improvement Program for the Parkland Region. Anton's Lake was aerated in conjunction with Minnedosa Game and Fish to further enhance and diversify angler opportunities within Western Region. Assisted Pelican Lake Fish Enhancement Committee and Oak Lake Water and Fish Enhancement Committee in evaluating the effectiveness of their new surface aeration systems.
- Completed regional stocking placing 15,150,000 walleye and 333,770 trout species in approximately 70 waterbodies throughout the Western region to supplement natural recruitment and diversify angling opportunities.
- Staff completed reviews of environmental licencing proposals, land use applications and development proposals through the region Integrated Resource Management Team and the Block Planning Committee. Staff reviewed Forestry Annual Operational Plans near waterways with the industry. Approximately 100 harvest blocks and associated crossings were mitigated in collaboration with Fisheries and Oceans Canada.
- Index netting was completed on Dauphin Lake, Lake of The Prairies, Lake Winnipegosis, Bell Lake, Swan Lake, Wahtopanah Lake, Oak Lake and Persee Lake.

Table FI.5

25.2(d).4 Fisheries Branch - Regional Fisheries Resources

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	875.9	15.00	834.9	41.0	
Other Expenditures	227.2		214.5	12.7	
Total Sub-Appropriation	1,103.1	15.00	1,049.4	53.7	

Fisheries Branch - Northern Fisherman's Freight Assistance

The Northern Fisherman's Freight Assistance program assists marginal commercial operations by partial subsidization of transporting certain species from selected lakes to Winnipeg. Fishers pay the first 20¢/kg of freight, Manitoba pays the next 45¢/kg, and fishers pay any costs over 65¢/kg. Eligible species are whitefish, pike, lake trout, perch, goldeye, tullibee and sucker. Subsidy payments to fishers are issued weekly by Freshwater Fish Marketing Corporation on behalf of Manitoba. Fisheries allowed to opt out of Freshwater Fish Marketing Corporation are paid by the Branch at season end.

Key Results Achieved:

- To ensure expenditure does not exceed the \$400,000 cap set in 2000, fishers receive an initial payment, usually 70 per cent of their estimated eligibility. They receive final payment at fishing-year end. While a full 30 per cent final payment may not be possible when production is high, a final payment higher than 30 per cent may occur in low-production years. Northern Fisherman's Freight Assistance paid about \$359,555.00 to 342 fishers for 2007 summer season. Payments to 35 fishers for winter season totaled approximately \$40,445.00.

Table FI.6
25.2(d).5 Northern Fisherman's Freight Assistance

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Other Expenditures	410.0		410.0	0.0	
Total Sub-Appropriation	410.0		410.0	0.0	

Fisheries Branch - Fisheries Enhancement Fund

The Manitoba Fisheries Enhancement Initiative was established in 1993 when Manitoba sport fishing groups and commercial fishers indicated a willingness to pay more for their fishing license if a portion went to build fish stocks. Using a notional linkage to this revenue, the Fisheries Enhancement Initiative has funded over 292 projects throughout Manitoba. These projects have aimed at strengthening fish populations, improving fish habitat or fisheries education.

The Fisheries Enhancement Fund was introduced in March 2007, a significant enhancement to existing programming into new categories of: fisheries research; fish stock assessment and monitoring; fisheries development, by way of capital investment and stocking; fisheries habitat rehabilitation and enhancement; and education initiatives pertaining to fisheries. The project review committee will include broader representation from a number of associations and stakeholders who have an interest in enhancing Manitoba's fisheries.

The objective of the Fisheries Enhancement Fund is to ensure that adequate fish stocks exist for the use and enjoyment of current and future generations of Manitobans; to promote local involvement of fisheries resource stakeholders; and to increase public understanding of the importance and value of fish and fish habitat.

Key Results Achieved

- Received 52 project applications of which 35 projects were funded.
- Held the annual Fisheries Enhancement stamp competition. The winning artwork, "White Bass" painted by James Carson, was unveiled at Oak Hammock Marsh in September 2007.

Table FI.7
25.2(d).6 Fisheries Enhancement Fund

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Grants	591.2		600.00	(8.8)	
Total Sub-Appropriation	591.2		600.0	(8.8)	

Table FI.8
Fishers Employed in Manitoba Commercial Fishery, 2006/07

	Northern Lakes	Lake Winnipeg	Lake Manitoba	Lake Wpgosis	Other Lakes	Overall
Summer						
Licence Holders	595	832	28	39	57	1,497
Hired Men or Helpers	148	167	19	66	12	400
TOTAL	743	999	47	105	69	1,897
Winter						
Licence Holders	129	162	400	169	207	1048
Hired Men or Helpers	70	31	290	119	42	540
TOTAL	199	193	690	288	249	1,588
Annual						
Licence Holders	604	891	401	172	208	2206
Hired Men or Helpers	152	178	291	153	42	804
TOTAL	756	1,069	692	325	250	3,010

Note: Those who fish in more than one area or season, or who fish both as hired persons and licence holders, are counted only once in the appropriate Total column. Where hired-person-and-liscence-holder duplication occurs, the individual is counted as a licence holder. Therefore, the table does not total horizontally or vertically. Commercial fishing statistics for 2007/08 fiscal year were not available in time to be included in this report. They will appear in the annual report for the next fiscal year.

Table FI.9
Commercial Fishing Production (Round kg), Total Value and Employment (Licensed Fishers Plus Hired Persons) 1997/98 to 2006/07.

Year	Northern Lakes		Lake Winnipeg		Lake Manitoba		
	Weight (kg)	\$ Value	Weight (kg)	\$ Value	Weight (kg)	\$ Value	
1997-98	2,621,550	3,565,750	3,991,600	8,340,050	1,518,000	2,207,800	
1998-99	2,761,800	4,350,500	4,825,600	14,119,350	1,734,450	2,284,800	
1999-00	3,235,650	5,087,500	5,419,050	16,983,500	1,943,950	2,416,950	
2000-01	3,318,650	5,608,800	6,217,850	20,386,750	2,342,400	2,847,050	
2001-02	3,188,100	5,341,850	6,237,950	20,380,350	2,115,750	3,797,100	
2002-03	3,260,350	5,750,000	6,204,150	20,894,400	2,286,850	2,877,650	
2003-04	3,025,250	4,883,100	6,543,300	17,030,250	1,995,650	1,992,400	
2004-05	2,813,900	4,299,400	6,380,100	16,724,900	1,362,650	1,046,900	
2005-06	2,231,600	3,135,350	6,397,500	16,736,250	1,074,000	1,201,500	
2006-07	2,294,400	3,900,400	6,355,550	17,707,500	1,211,950	1,575,500	
	Lake Winnipegosis		Other Lakes		Manitoba Total		
Year	Weight (kg)	\$ Value	Weight (kg)	\$ Value	Weight (kg)	\$ Value	Total Employment
1997-98	1,465,050	842,800	915,700	725,050	10,511,900	15,681,450	3,237
1998-99	2,106,550	1,892,650	775,000	1,273,000	12,203,400	23,920,300	2,990
1999-00	2,719,850	2,266,250	778,550	951,850	14,097,050	27,706,050	3,216
2000-01	2,753,550	2,004,200	892,250	1,131,450	15,524,700	31,978,250	3,224
2001-02	2,577,000	1,846,600	702,400	917,200	14,821,200	32,283,100	3,229
2002-03	2,681,150	1,416,400	661,250	827,800	15,093,750	31,766,250	3,186
2003-04	2,221,550	1,111,300	1,171,200	1,832,850	14,956,950	26,849,900	3,340
2004-05	1,079,350	842,000	1,113,800	1,826,650	12,749,800	24,739,850	3,272
2005-06	1,343,600	854,000	1,016,600	1,852,500	12,063,300	23,779,600	3,149
2006-07	1,228,900	916,500	1,110,450	1,879,400	12,201,250	25,979,300	3,010

NOTE: Total value includes both Initial Value and Final Payment.

Commercial fishing statistics for 2007/08 fiscal year were not available in time to be included in this report. They will appear in the annual report for the next fiscal year.

Table FI.10

Commercial Fishing Production (Round Weights kg) by Area and Total Value by Species, 2006/07.

Species	Northern Lakes		Lake Winnipeg		Lake Manitoba		Lake Winnipegosis	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Bass			13,500	2,100				
Carp	150	50	87,400	54,950	201,100	101,950	18,550	25,350
Catfish			Trace ²					
Goldeye	2,700	50	37,200	4,800		Trace ²	Trace ²	
Mullet	202,050	21,250	77,350	20,350	62,700	306,750	470,450	370,600
Perch	450	50	9,700	6,950		181,950	50	2,800
Pickerel	797,600	14,050	4,279,000	301,800		199,150	120,650	17,050
Pike	535,800	46,550	68,550	18,150		151,650	41,950	130,100
Sauger	9,950	1,100	107,400	42,100		2,900	Trace ²	Trace ²
Trout	40,000							
Tullibee	53,350	2,600	100					
Whitefish	541,600	25,050	820,100	404,050		3,800	17,900	13,450
Total	2,183,650	110,750	5,500,300	855,250	263,800	948,150	669,550	559,350
Species	Other Lakes ¹		Total Production			Total Value \$ ³		
	Summer	Winter	Summer	Winter	Total	Summer	Winter	Total
Bass			13,500	2,100	15,600	7,050	1,450	8,500
Carp	15,850	29,400	323,050	211,700	534,750	124,850	93,950	218,800
Catfish			Trace ²		Trace ²	Trace ²		Trace ²
Goldeye	100	Trace ²	40,000	4,850	44,850	81,450	10,900	92,350
Mullet	83,100	116,650	895,650	835,600	1,731,250	282,300	288,900	571,200
Perch	200	4,100	10,400	195,850	206,250	32,850	616,500	649,350
Pickerel	158,050	287,800	5,355,300	819,850	6,175,150	17,895,850	2,790,800	20,686,650
Pike	107,850	221,050	754,150	567,500	1,321,650	451,550	336,750	788,300
Sauger	200	150	117,550	46,250	163,800	335,350	131,600	466,950
Trout			40,000		40,000	29,650		29,650
Tullibee		750	53,450	3,350	56,800	42,600	1,750	44,350
Whitefish	16,050	69,150	1,395,650	515,500	1,911,150	1,666,800	756,400	2,423,200
Total	381,400	729,050	8,998,700	3,202,550	12,201,250	20,950,300	5,029,000	25,979,300

¹ Includes Cedar, Chitek, Crab, Dauphin, Inland, Little Limestone, Little Strong, Pelican, Red Deer, St. Martin, Swan, Tan, Waterhen, William² Small amount.³ Total \$ value includes both initial value and final payment.**NOTE:** Commercial fishing statistics for 2007/08 fiscal year were not available in time to be included in this report. They will appear in the annual report for the next fiscal year.

Table FI.11**Angling Licence Sales and Revenue 1997/98 to 2006/07**

Year	Resident/Manitoba – Senior Conservation			Total: Resident of Manitoba Senior				
	Number	Fee \$	Revenue \$	Number	Revenue \$			
1997/98	7,878	5.61	36,615.58	7,878	36,615.58			
1998/99	8,700	5.61	40,315.00	8,700	40,315.00			
1999/00	8,935	5.61	41,411.35	8,935	41,411.35			
2000/01	8,532	5.61	39,537.52	8,532	39,537.52			
2001/02	8,621	5.61	39,940.81	8,621	39,940.81			
2002/03	8,341	5.61	38,657.01	8,341	38,657.01			
2003/04	12,256	0	(9,593.98)	12,256	(9,593.98)			
2004/05	12,530	0	(12,050.00)	12,530	(12,050.00)			
2005/06	12,977	0	(12,491.00)	12,977	(12,491.00)			
2006/07	13,923	0	(13,394.00)	13,923	(13,394.00)			
	Resident of Manitoba- Regular			Total: Resident of Manitoba (includes Senior licenses above)				
Year	Number	Fee \$	Revenue \$	Number	Revenue \$			
2004/05	44,885	15.89	669,173.65	73,934	10.28	686,978.52	131,349	1,344,102.17
2005/06	44,851	15.89	668,658.39	71,155	10.28	661,127.40	128,983	1,317,294.79
2006/07	46,810	15.89	697,872.90	74,851	10.28	695,393.28	135,584	1,379,872.18
	Resident of Canada-Regular			Resident of Canada- Conservation		Total: Resident of Canada		
Year	Number	Fee \$	Revenue \$	Number	Fee \$	Revenue \$	Number	Revenue \$
1993/94	58,833	12.50	706,624.50	73,227	7.50	512,963.00	132,060	1,219,587.50
1994/95	57,783	12.50	694,044.00	77,716	7.50	544,498.00	135,499	1,238,542.00
1995/96	55,235	12.50	663,355.00	76,844	7.50	538,289.00	132,079	1,201,644.00
1996/97	52,158	12.50	626,742.00	75,081	7.50	526,422.50	127,239	1,153,164.50
1997/98	51,859	14.02	676,760.18	73,603	8.41	546,849.23	125,462	1,223,609.41
1998/99	57,381	14.02	748,238.62	84,000	8.41	623,386.00	141,381	1,371,624.62
1999/00	57,567	14.02	750,690.37	84,938	8.41	630,356.58	142,505	1,381,046.92
2000/01	56,092	14.02	731,276.84	85,256	8.41	632,700.96	141,348	1,363,977.80
2001/02	56,951	14.02	742,473.02	86,223	8.41	639,893.43	143,174	1,382,366.45
2002/03	54,801	14.02	714,456.02	81,629	8.41	605,678.89	136,430	1,320,134.91
2003/04	53,995	14.02	703,974.90	82,576	8.41	612,873.16	136,571	1,316,848.06

Continued...

	Resident of Canada, Non Resident of Manitoba- Regular			Resident of Canada, Non Resident of Manitoba- Conservation			Total: Resident of Canada, Non Resident of Manitoba	
Year	Number	Fee \$	Revenue \$	Number	Fee \$	Revenue \$	Number	Revenue \$
2004/05	1,906	37.38	69,383.28	8,939	18.69	158,350.91	10,845	227,734.19
2005/06	1,705	37.38	62,055.90	8,495	18.69	150,422.55	10,200	212,478.45
2006/07	1,831	37.38	66,634.78	9,106	18.69	161,263.14	10,937	227,897.92
	Non-Resident of Canada – Regular			Non-Resident of Canada- Conservation			Total: Non-Resident of Canada	
Year	Number	Fee \$	Revenue \$	Number	Fee \$	Revenue \$	Number	Revenue \$
1993/94	8,770	32.50	280,744.00	20,742	17.50	352,905.50	29,512	633,649.50
1994/95	8,299	32.50	265,668.50	21,906	17.50	372,702.50	30,205	638,371.00
1995/96	7,821	32.50	250,369.50	22,448	17.50	381,856.00	30,269	632,225.50
1996/97	6,840	32.50	218,945.50	21,757	17.50	370,199.50	28,597	589,145.00
1997/98	6,712	37.38	244,557.56	23,406	20.56	458,473.36	30,118	703,030.92
1998/99	7,149	37.38	260,237.62	26,223	20.56	513,312.88	33,372	773,550.50
1999/00	7,192	37.38	261,840.96	27,151	20.56	531,532.56	34,343	793,373.52
2000/01	6,130	37.38	223,166.40	29,959	20.56	586,452.04	36,089	809,618.44
2001/02	6,120	37.38	222,788.60	27,716	20.56	542,490.96	33,836	765,269.56
2002/03	6,075	37.38	221,122.50	26,121	20.56	511,251.76	32,196	732,374.26
2003/04	5,974	37.38	217,466.12	24,952	20.56	488,348.12	30,926	705,814.24
2004/05	4,755	51.40	239,777.00	24,089	28.04	651,714.56	28,844	891,491.56
2005/06	4,271	51.40	215,364.40	23,116	28.04	625,376.64	27,387	840,741.04
2006/07	3,694	51.40	186,241.60	21,353	28.04	577,719.12	25,047	763,960.72
	Total Regular Licenses			Total Conservation Licenses			Total Licenses	
Year	Number	Revenue \$	Number	Revenue \$	Number	Revenue \$	Number	Revenue \$
1993/94	67,603	987,368.50	93,969	865,868.50	161,572	1,853,237.00		
1994/95	66,082	959,712.50	99,622	917,200.50	165,704	1,876,913.00		
1995/96	63,056	913,724.50	99,292	920,145.00	162,348	1,833,869.50		
1996/97	58,998	845,687.50	96,838	896,622.00	155,836	1,742,309.50		
1997/98	58,571	921,317.74	104,887	1,041,938.17	163,458	1,963,255.91		
1998/99	64,530	1,008,476.24	118,923	1,177,013.88	183,453	2,185,490.12		
1999/00	64,759	1,012,531.20	121,024	1,203,300.49	185,783	2,215,831.79		
2000/01	62,222	954,443.24	123,747	1,258,690.52	185,969	2,213,133.76		
2001/02	63,071	965,251.62	122,560	1,222,325.20	185,631	2,187,576.82		
2002/03	60,876	935,578.52	116,091	1,155,587.66	176,967	2,091,166.18		
2003/04	59,969	921,441.02	119,784	1,091,627.30	179,753	2,013,068.32		
2004/05	51,546	978,333.93	119,492	1,484,993.99	171,038	2,463,327.92		
2005/06	50,827	946,078.29	115,743	1,424,435.59	166,570	2,370,513.88		
2006/07	52,335	950,749.28	119,233	1,420,981.50	171,568	2,371,730.70		

Note: Revenue figures are net (less vendor's commission).

Resident of Manitoba Senior's Conservation Licenses were introduced in 1998/99.

Starting with the 1999/00 season – angling licenses are valid from May 1 – April 30. License sale statistics for the 2007/08 Annual Report will be based on the most recent complete season (i.e. the 2006/07 season).

Resident of Canada, Non Resident of Manitoba Regular and Conservation Licenses were introduced in 2004/05.

Table FI.12
Bait Fishing Industry Statistics

	Year				
	2003/04	2004/05	2005/06	2006/07	2007/08
No. of licensed bait fish fishers (frozen & live)	76	70	63	63	64
No. licensed for collection of live bait fish	39	35	33	35	36
No. of leech harvesters	32	24	21	24	23
No. of live bait dealers	62	57	50	56	52
No. of kgs of frozen bait fish produced	97,800	82,100	85,750	62,280	75,480
No. of live bait fish produced (dozen)	129,300	105,710	133,660	129,380	127,180
No. of kgs of leeches produced	1,830	1,900	1,720	1,680	1,480
Estimated gross sales					
Live bait fish	\$170,180	\$147,650	\$199,200	\$222,230	\$204,970
Frozen bait fish	\$643,110	\$558,150	\$542,430	\$473,340	\$598,670
Leeches	\$83,950	\$85,290	\$78,780	\$78,590	\$73,380
Total	\$897,240	\$791,090	\$820,410	\$774,160	\$877,020

Table FI.13
Manitoba Fish Farming Statistics

		Year				
		2003/04	2004/05	2005/06	2006/07	2007/08
No. of Licensed Operators		25	28	28	29	31
	Species					
No. of Eggs Imported	Rainbow Trout	0	20,000	15,500	115,00	27,500
	Arctic Char	0	0	0	0	0
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Fingerlings Imported	Rainbow Trout	0	20,000	15,500	120,000	120,800
	Arctic Char	0	0	0	0	0
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Eggs/Fry Purchased in Manitoba	Rainbow Trout	0	0	0	0	0
	Arctic Char	200,000	0	200,000	214,000	30,000
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Fingerlings Purchased in Manitoba	Rainbow Trout	32,250	4,000	8,100	9,300	6,850
	Arctic Char	0	90,000	0	0	0
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Fingerlings Sold	Rainbow Trout	184,500	191,000	162,200	168,270	170,050
	Arctic Char	9,800	100,000	0	0	30,000
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Kgs of Fish Sold	Rainbow Trout	9,812	10,227	10,520	10,800	21,100
	Arctic Char	24,691	40,409	7,159	13,180	4,000
	Brook Trout	76	234	0	0	0
	Other	10,909	5,700	0	0	20
No. of Fingerling Customers		602	579	483	496	652

Table FI.14 **Fisheries Monitoring 2007/08**

Background

Fisheries Branch of Manitoba Water Stewardship undertakes an annual fish stock monitoring program to evaluate the status of fish stocks and make management changes necessary for the sustainability of the resource. Below is the list of lakes index netted in 2007/08.

Western Region

Dauphin Lake
Lake of the Prairies
Lake Winnipegosis
Bell Lake
Swan Lake
Wahtopanah Lake
Oak Lake
Persee Lake

Northwest Region

Cedar Lake
Saskatchewan River (sturgeon)
Wekusko Lake

Eastern Region

Winnipeg River (sturgeon)
Lac du Bonnet
Whitemouth Lake

Central Region

Lake Winnipeg
Lake Manitoba

Northeastern Region

Playgreen Lake
Lake Winnipeg (Mossy Bay)
Southern Indian Lake
Setting Lake
Nelson River (sturgeon)

It should be noted that while some major fisheries are monitored each year, others are monitored on a rotating or as required basis.

CONSERVATION DISTRICT AND WATERSHED ASSISTANCE

Conservation District Program

The Conservation Districts Program is a partnership between the Province of Manitoba and participating municipalities to provide for the conservation, control and prudent use of resources through the establishment of conservation districts, under *The Conservation Districts Act* of 1972.

The mandate of the program is to promote the sustainable use and management of land, water and related resources on a watershed basis. The Province thus promotes watershed-based partnerships with municipalities to develop integrated watershed management plans, implement voluntary, incentive based programs and projects through partnerships that address risks to water resources and aquatic ecosystems, and ensure that the ecological integrity and overall health of each watershed is protected by empowering the local district boards to make decisions that will have impacts for present and future generations.

Manitoba provides grants to support the Conservation District Program in areas such as water management, soil conservation, water storage, wildlife habitat, preservation of historic resources, recreation, public education, administration, and a variety of other areas that promote sustainable resource management.

In 2007/08, provincial grants totalling \$4,835,000 were provided to 18 conservation districts, as follows:

Alonsa	\$266,000.00
Assiniboine Hills	\$50,000.00
Cooks Creek	\$285,000.00
East Interlake	\$225,000.00
Inter-Mountain	\$252,000.00
Kelsey	\$150,000.00
Lake of the Prairies	\$150,000.00
La Salle Redboine	\$230,000.00
Little Saskatchewan River	\$180,000.00
Mid Assiniboine River	\$115,000.00
Pembina Valley	\$400,000.00
Seine-Rat River	\$325,000.00
Swan Lake Watershed	\$125,000.00
Tiger Hills	\$115,000.00
Turtle Mountain	\$320,000.00
Turtle River Watershed	\$410,000.00
Upper Assiniboine River	\$260,000.00
West Interlake	\$50,000.00
West Souris	\$217,000.00
Whitemud Watershed	\$710,000.00
Total:	\$4,835,000.00

The annual budgets and activities of the 18 conservation districts are overseen and directed by the Conservation Districts Commission, a committee, chaired by the Deputy Minister of Manitoba Water

Stewardship. Watershed Planning and Program staff assist the conservation districts in developing sustainable, integrated watershed management plans and monitoring the activities of the Conservation District Program.

In 2007/08, two conservation district development proposals were completed for consideration by municipalities including the proposed West Interlake Conservation District and a merger between Tiger Hills and Mid Assiniboine River conservation districts with the additional inclusion of four municipal authorities. Expansion proposals were drafted for the Seine-Rat River Conservation District to include the Rural Municipality of Stuartburn; East Interlake Conservation District to include the Rural Municipality of St. Andrews; and Alonsa Conservation District to include two communities under the jurisdiction and authority of Manitoba Aboriginal and Northern Affairs.

Programming and financial details may be obtained from the Annual Report for the Conservation Districts of Manitoba.

Table CA.1
25.2(e) Conservation District and Watershed Assistance

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Other Expenditures	4,835.00		4,835.00	0.0	
Less Recoverable from Other Appropriations	(425.0)		(425.0)	0.0	
Total Sub-Appropriation	4,410.0		4,410.0	0.0	

REGULATORY AND OPERATIONAL SERVICES

Regulatory and Operational Services - Administration

Staff provide the necessary direction and program coordination for the Regulatory and Operational Services Division of Manitoba Water Stewardship so that the optimum development, allocation, and conservation of the water resources of the province are ensured. Staff provide administrative and policy direction, control and monitor funding, monitor efficiency and effectiveness of divisional programs achieving goals consistent with provincial and departmental policies. Programs are administered within budgeted funding and schedules.

Table RS.1

25.3(a) Regulatory and Operational Services - Administration

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	478.4	5.00	443.5	34.9	
Other Expenditures	455.0		599.3	(144.3)	1
Total Sub-Appropriation	933.4	5.00	1,042.8	(109.4)	

1. Under expenditure is due to lower general operating expenses.

Flood Forecasting and Flood Response Coordination

Flood Forecasting and Flood Response Coordination operates a Hydrologic Forecast Centre that provides a hydrologic reporting, forecasting and warning service to all levels of government and the public. Its purpose is to promote public safety, give direction to emergency response and facilitate optimum operation of water control works such as dams, diversions and floodways for flood damage reduction. The Section also includes a development review component that promotes long-term flood damage reduction by ensuring that developments, subdivisions and crown land sales adhere to provincial land use policies regarding the risk of flooding and erosion. The Section also performs dam operations to ensure a sufficient supply of water in reservoirs and rivers and suitable lake levels for recreation and fish. It also contributes climatic information for the design of water control structures.

Key Results Achieved:

- Issued spring flood outlooks and daily flood reports and forecasts for streams with high water conditions or flooding. These reports were widely distributed for use by all levels of government, emergency management and the public for both spring floods and summer rain generated events.
- Provided river flows and forecasts and lake and reservoir forecasts for operation of floodways, diversions and dams and for deployment of ice breaking equipment for the purpose of flood control and water supply.
- Provided flash flood watches and warnings and ice jam advisories for emergency water management and to promote public safety.
- Operated dams to ensure optimum lake levels for recreation.
- Reviewed applications for subdivisions and Crown land sales/leases and development permits to ensure adherence to provincial land use policies for flood and erosion control. These policies were also reviewed and updated.
- Developed a real time weather network continued in collaboration with Weatherbug and the Canadian Wheat Board, and a soil moisture-monitoring network for the watershed upstream of Shellmouth Dam.

- Developed seasonal operation guidelines for Shellmouth Dam.
- Maintained and updated a website containing information on precipitation and hydrologic conditions.
- Upon request, provided hydrometeorological information, via e-mail, website, and telephone.

Activity	Number
Flood reports issued, including tables and forecasts	120
Spring flood outlooks issued	2
Flash flood watches, high water or ice advisories issued	5
Operations of Shellmouth Dam (gate changes)	80
Operations of Whiteshell recreational dams	24
Briefings of the Shellmouth Operation Liaison Committee	15
Media briefings (City and Rural)	30
Inter-Agency Emergency Management Committee briefings	8
Coordination sessions with other water management agencies	28
Requests for hydrometeorological information responded to	600
Conference calls and workshops on development and investigations	12
Private Land Subdivision proposals reviewed	410
Crown land sales and lease requests reviewed	228
Red River Valley designated flood area permits	22
Licensing Advisory Committee reviews	12
New professional positions created and filled	2
Vacant positions filled	2

Table RS.2
25.3(b) Flood Forecasting and Flood Response Coordination

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	260.8	6.00	423.6	(162.8)	1
Other Expenditures	216.7	-	237.5	(20.8)	
Total Sub-Appropriation	477.5	6.00	661.1	(183.6)	

1. Under expenditure is due to vacancies in the branch.

Water Control System Management

The Section participates in programs, planning exercises, studies, analyses and other activities related to provincial waterways; water control infrastructure such as agricultural drains, flood control works, and dams and reservoirs; erosion control programs; flood preparedness, coordination and response; and various water management issues regarding drainage and flooding.

Key Results Achieved:

- For the provincial waterway infrastructure, multi-year capital planning was undertaken in concert with Manitoba Infrastructure and Transportation. The works include agricultural drainage and other waterways, water crossings, water control structures, dams and diking systems.
- Provided engineering design and technical support for a number of infrastructure projects, as support to Manitoba Infrastructure and Transportation in its infrastructure-delivery functions. The hydraulic capacity of

ten Manitoba Infrastructure and Transportation highway crossings were reviewed and approved, and an additional 13 crossings were in the process of being reviewed. Development proposals that could affect the provincial waterway infrastructure were investigated and 61 authorization permits were issued outlining the terms and conditions for those developments, to ensure the continued safe and effective functioning of the infrastructure.

- Provided technical and engineering input, advice, planning assistance, assessments, and information for integrated watershed management plans and surface water management plans being developed by watershed planning authorities. Similar technical and engineering services were provided to conservation districts for a variety of water management problems and water infrastructure proposals, as well as for the capital works program planning process in conservation districts that manage provincial waterway infrastructure.
- Provided engineering and technical support to the Water Control Works and Drainage Licensing Section for evaluating the effects and technical soundness of drainage or other water control works proposed by applicants for licenses of works under *The Water Rights Act*.
- Advanced the procurement of a provincially-owned ice-breaker through to the contract award stage, in concert with the North Red Community Water Maintenance Inc. (NRCWMI) and the Fleet Vehicles Agency that will assume ownership of the ice-breaker. Continued to work with the NRCWMI regarding ice jam mitigation work by its Amphibex ice-breaker to establish annual ice-breaking work plans. Provided engineering input, along with Manitoba Infrastructure and Transportation and NRCWMI, for the rehabilitation of the NRCWMI's Amphibex by CEDA Reactor Ltd. A second ice-breaker was leased in the spring of 2008, from Eco-Tech Ltd., for ice jam mitigation work on the northern Red River. An ice-cutting program was developed and executed on the Red River at and north of Selkirk in the spring of 2008, with the NRCWMI undertaking the ice-cutting operations, using three different ice-cutters.
- Initiated emergency preparedness plans for the Morden and Rivers dams through an engineering consultant contract with SNC-Lavelin Engineering.
- Along with participants from Manitoba Hydro, the City of Winnipeg, and a number of engineering consulting firms, initiated plans for the 2008 Annual Canadian Dam Association conference in Winnipeg.
- Continued to work with the Prairie Farm Rehabilitation Administration Canada on the on-going study of pertinent engineering and environmental issues related to the potential addition of gates on the spillway structure of the Shellmouth Dam.
- The Diking Commissioner continued review and oversight of the City of Winnipeg's primary diking system. Participation continued in the Shoreline Erosion Technical Committee, which has members from Manitoba Water Stewardship, Manitoba Conservation, Manitoba Hydro, Fisheries and Oceans Canada, and local planning districts and local municipalities. The Committee reviews proposals for shoreline erosion projects along the shores of Lake Winnipeg, made by local governments and individuals and permitted by the local planning authority.
- Continued the maintenance and migration to an electronic platform, of a database of maps, plans, field/survey information and reports regarding provincially-owned water control infrastructure and water management. Requests for information and electronic or paper copies from this database were filled and specialized equipment and supplies were maintained.

Table RS.3**25.3(c) Water Control System Management**

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	526.5	8.00	591.8	(65.3)	1
Other Expenditures	103.5		82.1	21.4	
Total Sub-Appropriation	630.0	8.00	673.9	(43.9)	

1. Under expenditure is due to vacancies in the branch.

Regulatory Services - Office of Drinking Water

The Office of Drinking Water was established to coordinate the activities of the province's drinking water program under *The Drinking Water Safety Act*, with the objectives:

- to administer and enforce *The Drinking Water Safety Act* and the regulations, licences, permits, advisories and orders made under it to assure public drinking water supplies are safe, adequate, aesthetically pleasing and acceptable for present and future residents of, and visitors to Manitoba;
- to provide a program that employs flexibility and prevention as an effective approach to public health protection;
- to provide guidance, technical expertise and up-to-date information and educational materials about drinking water safety to water suppliers and the public;
- to promote involvement of public, government agencies and departments, communities and private organizations in the decision-making process, and to share expertise and to facilitate co-operative efforts in drinking water programs and policies for ensuring safe drinking water; and
- to provide adequate, clear, concise, and publicly visible documentation of results.

Key Results Achieved:

- Reviewed and approved the design plans and specifications for the construction of public and semi-public water supply and distribution systems and wastewater collection and pumping systems to ensure compliance with guidelines and standards.
- Issued permits and licenses for the construction and operation of public water supply and wastewater collection projects and identified semi-public water supplies.
- Undertook routine and unscheduled on-site inspections of water sources, facilities and equipment and the assessment of new construction and ongoing operation and maintenance of water systems to verify their adequacy and reliability for producing and distributing safe water.
- Monitored the operation of water treatment system and distribution works, and wastewater collection and pumping systems.
- Monitored water quality (raw and treated) through the evaluation and reporting of results from laboratory water quality analyses.
- Developed guidelines for the design, construction, and operation of water supply and wastewater collection and pumping systems pursuant to *The Drinking Water Safety Act* and its regulations and *The Public Health Act* and its regulations.
- Developed policies and procedures for enforcement of water supply system, wastewater collection and pumping system regulations.

- Developed protocols for the sampling and monitoring of water supplies.
- Assessed new, innovative, and alternative treatment technologies for water systems or works pursuant to the requirements of *The Drinking Water Safety Act*.
- Participated in the co-ordination of operator training and certification programs as required to ensure compliance with the requirements of the regulations.
- Participated in the development of watershed management and wellhead protection initiatives for the protection source water quality.
- Provided technical support to the office of the Chief Medical Officer of Health and Regional Medical Officers of Health.
- Provided training for Environment Officers and Public Health Inspectors on standards and regulatory requirements to ensure they have current knowledge and skills to perform successfully and safely their duties.
- Provided information relating to drinking water quality inspections, incident data collection and dissemination and analysis for field staff, managers and department executive through the use of data management tools.
- Represented the department on various national committees and organizations to achieve efficiencies and pro-active response to emerging issues.
- Provided technical support for emergency response services to environmental accidents involving drinking water.
- Prepared and delivered information sessions, electronic and written material on new or changing division programs.

Table RS.4

25.3(d).1 Regulatory Services - Office of Drinking Water

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	1,069.0	21.00	1,100.2	(31.2)	
Other Expenditures	1,191.7		1,805.8	(614.1)	1
Total Sub-Appropriation	2,260.7	21.00	2,906.0	(645.3)	

1. Under expenditure is due to less field inspections and associated support expenditures due to vacant positions.

Regulatory Services - Water Control Works and Drainage Licencing

This program area ensures that private and municipal drainage, dams and other water control works are constructed, established, operated or maintained in accordance with *The Water Rights Act*.

Key Results Achieved:

- The Section has continued progress on implementing the Drainage Regulation Action Plan. This action plan consists of the following:
 - Legislative change – added regulations to *The Summary Convictions Act* to allow for set fines for related offenses under *The Water Rights Act*. Fines range from \$190 to \$2,324 per offence.

- Staffing – hired ten staff; nine of which were Water Resource Officers. The last new position was a Geographic Information Systems Operator. All positions were staffed in rural locations and two of the positions were designated bilingual.
- Staff training – staff attended an enforcement training course designed for the Water Control Works and Drainage Licensing section officers. Manitoba Justice reviewed and approved course content. Northwest Law Enforcement Academy, based in Winnipeg, was contracted to deliver the course.
- Policy review – reviewed, revised, and presented policies related to water control works and drainage licencing for approval.
- Communications – made presentations regarding the Drainage Regulation Action Plan to municipal councils, Association of Manitoba Municipalities, Manitoba Conservation Districts Association and Keystone Agricultural Producers. Section staff returned to Ag Days in January 2007 to promote changes underway.
- Tracking Progress – implemented a computer database to track project files. Data migration into the database will be completed in 2008/09, enabling province-wide tracking of licensing and enforcement matters related to water control works and *The Water Rights Act*.
- Established offices in Arborg, Stonewall, Shoal Lake, Swan River, Neepawa, Deloraine, Ste Anne, and St Laurent, two of which are staffed with bilingual Water Resource Officers.

Table RS.5

25.3(d).2 Regulatory Services - Water Control Works and Drainage Licensing

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	900.4	25.12	1,137.8	(237.4)	1
Other Expenditures	471.2		278.6	192.6	2
Total Sub-Appropriation	1,371.6	25.12	1,416.4	(44.8)	

1. Under expenditure is due to vacancies in the branch.
2. Over expenditure is due to set up costs for new positions in various rural locations.

Regulatory Services - Water Use Licensing

Water Use Licensing consists of two distinct program areas: the licensing of water abstraction projects as required under the provisions of *The Water Rights Act* and the licensing of water power (hydroelectric) projects under *The Water Power Act*. The common theme of both programs is the allocation of a valuable provincial Crown resource for a beneficial purpose while ensuring the protection of the interest of all Manitobans and potentially affected third parties. The section is comprised of 18 FTE positions, including 14 FTEs working on water rights licensing issues, three assigned to water power licensing issues, and a section manager. The academic backgrounds of staff include engineers, hydrogeologists, environmental scientists, a soil scientist, technologists, and a database management specialist.

Water Rights Licensing Program:

Working under the authority of *The Water Rights Act*, staff of the Water Rights Licensing program process applications requesting the allocation of surface water or groundwater for municipal, agricultural (i.e. livestock), industrial, irrigation and other purposes. All new projects require the issuance of either a Development Authorization for surface water projects or a Groundwater Exploration Permit for groundwater sourced projects in advance of such projects proceeding to construction. Water rights licenses are issued to the applicants subsequent to the satisfactory completion of a project. In addition to these instruments, water rights licensing staff also respond to requests to divert water for short term purposes. In such cases (e.g. hydrostatic testing) a letter of authorization is issued rather than a formal licence.

Three staff are located in Carberry at the Canada-Manitoba Crop Development Centre. Two of these people are directly involved in licensing irrigation projects. The third person is an irrigation specialist who conducts programs into the safe and efficient application of irrigation water to crops, thus ensuring the sustainability of Manitoba's irrigation sector.

Water Use Licensing Revenue

Licence (application) fees	\$9,300.00
Industrial water use abstraction fees	\$68,321.00
Total	\$77,621.00

Water Power Regulation and Crown Land Development Review:

Staff of the Water Power Licensing program are responsible for two important sub-program areas, the most high profile of which is the licensing (or re-licensing) of new and existing hydroelectric power stations. Currently, there are 18 water power projects that have been licensed, some of which were licensed over 50 years ago. Licensing continues to react to evolving societal expectations regarding issues of stewardship of the resource and equity issues for both locally affected residents and Manitobans as a whole.

The other sub-program is concerned with the assessment and transfer of lands to Canada to fulfill obligations under the Treaty Land Entitlement program, and the disposition of applications to develop Crown land parcels located within the Water Power Licence Areas and/or Water Power Reserve Areas. Although these projects have a short time frame compared to the licensing of water power stations they are of great importance to the applicant.

Water Power Licensing Revenue

Land Rentals	\$727,699.00
Water Power Rentals	\$116,595,649.75
Total	\$117,323,348.75

Table RS.6**25.3(d).3 Regulatory Services - Water Use Licensing**

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	998.9	18.00	1,176.1	(177.2)	1
Other Expenditures	117.8		110.1	7.7	
Total Sub-Appropriation	1,116.7	18.00	1,286.2	(169.5)	

1. Under expenditure is due to vacancies in the branch.

Waterway Planning and Operational Services Support

To enhance the various water management objectives of the province, regarding water management issues in general, regarding flood protection, and regarding dam safety and preparedness.

Table RS.7

25.3(e) Waterway Planning and Operational Services Support

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Other Expenditures	563.5		507.8	55.7	
Total Sub-Appropriation	563.5		507.8	55.7	

WATER STEWARDSHIP INITIATIVES

The Water Stewardship Initiatives provide funding for scientific research, projects, incentives and activities that further the protection and stewardship of Manitoba's water resources and aquatic ecosystems. The Water Stewardship Initiatives funding assists in the development and implementation of watershed management plans and water conservation programs. Funding also promotes and supports priority initiatives and partnerships toward achieving Manitoba's ambient water quality, source water protection, riparian and wetland protection, water resource management, flood protection, and water-related economic development objectives.

The following are some of the initiatives and activities supported by the Water Stewardship Initiatives in 2007/08:

Project	Amount (000s)	Description
Watershed planning	\$125.0	Manitoba Water Stewardship, in partnership with conservation districts, initiated five new watershed plans in 2007/08. The Department and the individual conservation districts signed a Memorandum of Understanding outlining agreement on the process and timeframe to develop a watershed plan and agreement on the role and responsibilities of the conservation district as it applies to the development and implementation of a watershed plan. Each of the five conservation districts received a \$25.0 grant to offset costs associated with development of the plan.
Regulation development & related consultations	\$19.7	Implementation of the Water Quality Management Zones for Nutrients. The development of the regulation establishing Water Quality Standards, Objectives, and Guidelines was initiated in 2007/08. Work also began on the development of other regulations, including those required to protect riparian areas and to protect against invasive species.
Water Council	\$36.7	This project involved the establishment and support of the Water Council in 2007/08. <i>The Water Protection Act</i> establishes the Manitoba Water Council. Subject to the direction of the Minister, the Water Council: <ol style="list-style-type: none">monitors the development and implementation of watershed management plans in the province;reviews regulations respecting water quality management zones, and provides advice to the Minister;advises the minister about matters relating to water generally;coordinates the activities of advisory boards and similar entities that perform functions relating to water, including advisory boards and other entities specified by regulation;assists in reporting sustainability indicators relating to water.
APF BMP top up	\$699.7	The Beneficial Management Practices (BMP) Top-Up Incentive Program was designed to provide an incentive for Manitoba producers to consider a select number of BMPs that promote water protection practices under the APF. The Program, delivered in partnership with the Canada-Manitoba Farm Stewardship Program and administered by Prairie Farm and Rehabilitation Administration (AAFC-PFRA), targets water quality issues by promoting the adoption of beneficial management practices on the landscape.
Riparian easements	\$300.0	On behalf of Manitoba Water Stewardship, Manitoba Habitat

Project	Amount (000s)	Description
		Heritage administered the purchase of riparian easements under <i>The Conservation Easement Act</i> .
Support to Rivers West - Red River Greenway initiative	\$75.0	Water Stewardship provided grant funding to Rivers West in support of the Red River Greenway Partnership Initiative.
Lake Winnipeg Stewardship Board	\$44.6	The Lake Winnipeg Stewardship Board was formed on July 18, 2003 to assist the Manitoba Government implement its Lake Winnipeg Action Plan. The Lake Winnipeg Stewardship Board is comprised of 18 members including community leaders, representatives of key stakeholders (e.g., Keystone Agricultural Producers, Association of Manitoba Municipalities, Lake Winnipeg Research Consortium). In order to better meet its mandate, the Board formed five committees. The Board meets monthly while the individual committees meet as required, but usually at least monthly.
Support to the Namao	\$100.0	The former Canadian Coast Guard vessel, Namao, is now owned and operated by the Lake Winnipeg Research Consortium. The Consortium is incorporated and is comprised of about 30 agencies and organizations with an interest in Lake Winnipeg. Financial support was jointly provided by Manitoba Hydro, Fisheries and Oceans Canada, and Manitoba Water Stewardship.
Collaborative science research on Lake Winnipeg	\$102.7	Manitoba Water Stewardship, Fisheries and Oceans Canada, and Environment Canada agreed to develop at least a five year science plan for Lake Winnipeg. Issues on Lake Winnipeg include loading of excessive nutrients, <i>E. coli</i> bacteria at beaches, and continued sound management of the highly productive commercial fishery. The Lake Winnipeg Science Plan will identify key research or knowledge needs to address specific management issues, will identify the government agency or agencies responsible for undertaking or implementing each research need, will identify associated costs with operating vessels, and will identify the delivery mechanism (e.g., Canada-Manitoba Agreement or Memorandum of Understanding on Lake Winnipeg Science).
Lake Winnipeg <i>E. coli</i> research	\$32.4	Specific research has been conducted since 2003 to identify the main source of <i>E. coli</i> at Lake Winnipeg beaches and the mechanism by which <i>E. coli</i> are transferred from this source to bathing areas. Although the investigation continued and research was conducted throughout the past, additional work is required to test a predictive model that would allow managers to predict those times when densities of <i>E. coli</i> would be elevated. Samples will also be collected to expand the DNA library used to identify animal sources of <i>E. coli</i> thereby reducing the number of unknown sources. Emphasis will be placed on submitting additional source reference material found in proximity to Lake Winnipeg. The goal of much of this work is to protect human health, provide scientific data to support management decisions, and provide sufficient scientific data to support a model that will provide the bathing public with real-time, daily predictability of <i>E. coli</i> levels. At present, data can only be provided 24 hours after samples are taken. It is anticipated that the impact of these actions will provide the public with real-time predictions of <i>E. coli</i> densities.

Project	Amount (000s)	Description
In-stream flow reserves studies	\$89.9	To date, flows in rivers have exceeded demand for allocatable water but the amount of available water decreases as development increases. The amount of allocatable water has typically been determined using minimum instream flows for sewage dilution. Minimum instream flows fail to provide intra annual and interannual flow variability that result in the ecological functions and processes necessary for the sustainability of healthy aquatic ecosystems. Moreover, <i>The Water Protection Act</i> amended <i>The Water Rights Act</i> to include the consideration of instream flows to ensure that aquatic ecosystems are protected and maintained. An effective instream flow program requires a well-coordinated, interdisciplinary team with adequate staff, training, and funding to address all instream flow and related issues that fall under Manitoba Water Stewardship's responsibilities. The province conducted an instream flow study of the Assiniboine River resulting in flow recommendations from April to September for medium and low flow water years.
Manitoba Commercial Inland Fishers' Federation	\$25.0	Manitoba Water Stewardship provides ongoing support to the Manitoba Commercial Inland Fishers' Federation, a single entity representing all commercial fishers' activities in Manitoba.
Legal and Consulting Services - Transboundary Water Issues	\$212.0	Legal counsel and professional consultants assisted Manitoba in responding to transboundary water threats, such as Devils Lake and Garrison diversion projects.
Lake Winnipeg Erosion Technical Committee	\$10.1	The Lake Winnipeg Shoreline Erosion Technical Committee provides technical advice to landowners regarding effective shoreline erosion control methods. This committee conducted three shoreline erosion demonstration projects at Winnipeg Beach, Traverse Bay, and Hnausa.
Ice jam mitigation	\$508.3	Manitoba worked with municipalities between the City of Winnipeg and Lake Winnipeg to operate the Amphibex in order to break ice immediately prior to normal spring melt, minimizing the potential for local flooding due to ice-jams.
Hydraulic and LiDAR survey	\$181.8	This project involved the hydrologic and hydraulic modelling of the Fisher River watershed to determine the impact of upstream drainage works on flood water levels in the downstream reaches. The modelling also assessed the impacts on flood levels of various river crossings (bridges etc.) over the Fisher River within the Peguis and Fisher River First Nations, and the hydraulic benefit of upgrading some of the most restrictive crossings. The study also determined the flood damages in various floods, and the benefits of reducing the flood levels.
River brushing	\$50.0	The project removed excess vegetation, such as willows, in the Fisher River through the Peguis and Fisher River First Nations.
Bridge reconstruction	\$16.3	The Department upgraded river crossings over the Fisher River.
Partners FOR the Saskatchewan River Basin	\$28.0	This organization is completing a State of the Saskatchewan River Basin report in partnership with the Prairie Provinces and community organizations.

Project	Amount (000s)	Description
Red River Basin Commission	\$155.9	The Red River Basin Commission was formed in 2002 to initiate a grass roots effort to address land and water issues in the Red River basin, as a result of a merger between The Red River Basin Board, The International Coalition, and the Red River Water Resources Council. Funding included support for a joint, basin-wide drought management plan.
Prairie Provinces Water Board	\$110.0	The Prairie Provinces Water Board (PPWB) is funded 50 per cent by Canada and 16.67 per cent by each of the provinces of Alberta, Saskatchewan and Manitoba. PPWB's primary responsibility is the administration of the Master Agreement on Apportionment. Funding also provided for the upgrading of computer software that computes inter-provincial apportionment of easterly flowing streams.
Public Service Announcement - Lake Winnipeg	\$30.0	Global Television produced a public service announcement on Lake Winnipeg, funded in part by Manitoba Water Stewardship.
Fisheries community co-management consultation initiative	\$20.0	This initiative involves a broad public consultation exercise led by consultants and includes First Nation Band councils, community councils, Manitoba Water Council, lake stewardship boards, commercial fishing associations, commercial tourism associations, recreational fishing interests, aboriginal associations, academia, environmental interest groups, federal and provincial departments with fisheries-related programming, and the public.
Dam safety assessments	\$165.2	Assessments based on universally accepted standards were completed for the Morden and Rivers dams. Manitoba Infrastructure and Transportation is responsible for ensuring the physical integrity of these dams and Manitoba Water Stewardship is responsible for assessing public safety issues and preparing emergency preparedness and response plans.
Sturgeon Creek water management study	\$199.1	A comprehensive water management study to address current drainage and flooding problems in the Sturgeon Creek watershed was completed.
Lake Manitoba Stewardship Board	\$14.0	Similar to the Lake Winnipeg Stewardship Board, a new board has been established for Lake Manitoba. The board consists of 15 members, meets monthly, and is supported by a technical secretariat through external contract. The Lake Manitoba Stewardship Board focuses on implementing the recommendations of the Lake Manitoba Regulation Review Advisory Committee and will deal with a variety of other lake level, water quality, and fisheries management issues.
Zone 5 – phosphorus use	\$14.8	Consultations on additional phosphorus regulatory requirements were conducted in the spring of 2007, focusing on requirements for urban areas.
Red River Basin drought management plan	\$15.0	Manitoba is working with North Dakota and Minnesota through the Red River Basin Commission to develop a drought management plan for the shared waters of the Red River basin. The plan will identify short and long-term actions needed to prepare adequately for a basin-wide flood and how waters will be shared.

Project	Amount (000s)	Description
Sandilands Aquifer Management Plan	\$17.4	Manitoba Water Stewardship has started work on a management plan for the Sandilands Aquifer Complex. Public consultations were initiated in 2007/08 with a goal of having an interim management plan developed in 2008/09.
Groundwater resources evaluation and monitoring	\$125.6	The purpose of this initiative is to define and evaluate the important aquifer systems supplying groundwater first, to regions around and south-east of Winnipeg, then to other major aquifers in Manitoba. The key objective is to develop regional groundwater flow models for providing estimates of aquifer capacity and sustainable yield to allow assessment and determination of allocation limits for groundwater users within the regions. The majority of work in 2007/08 focused on the Sandilands Aquifer Complex.
Fairford Fishway Study	\$24.9	The Fairford Fishway study was completed based on priority identified by Manitoba Commercial Inland Fishers Federation.
Lake friendly label campaign	\$25.0	This campaign promotes the sale of environmentally "lake-friendly" products by retailers and their purchase by consumers in communities adjacent to the south basin of Lake Winnipeg and implemented by the Lake Winnipeg South Basin Mayors and Reeves Committee. In 2007, reeves and mayors from communities and municipalities surrounding the south basin of Lake Winnipeg formed a committee in discussion the Department to play a leadership role in assisting with actions to restore the health of Lake Winnipeg.
Canada-Manitoba Hydrometric Agreement	\$803.9	Water level and stream flow data collected under the Canada-Manitoba Hydrometric Agreement supports activities such as operating water control works, flow forecasting, water rights licencing, water management investigations and hydrologic studies, fish passage and instream flow needs and other ecosystem protection and scientific studies.
Ortho photography refresh project	\$15.8	Manitoba Water Stewardship is one of several departments contributing towards the refresh of the province's Ortho photography through a multi-year project. The Department utilizes the ortho photography to support geospatial analysis requirements for watershed planning and other decision-making.
Pharmaceuticals in water	\$24.2	A number of prescription and non-prescription drugs have been identified in the effluent of sewage treatment plants and in the receiving waters associated with large North American urban centres. Chronic exposure of aquatic organisms to these pharmaceuticals in surface water could induce biological effects that may alter the physiology, behaviour, or reproductive capability of aquatic life and wildlife. A preliminary assessment of results from limited water quality monitoring by Manitoba Water Stewardship indicated the presence of numerous pharmaceuticals. Additional sampling was completed to assess the presence of pharmaceuticals downstream of southern Manitoba's largest population centres (Winnipeg, Brandon, Portage la Prairie).

Table WS.1**25.4 Water Stewardship Initiatives**

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Other Expenditures	4,885.5		6,047.7	(1,162.2)	1
Total Sub-Appropriation	4,885.5		6,047.7	(1,162.2)	

1. Under expenditure is mainly due to delays in construction activities for the Hydraulic Model & LiDAR Survey for the Peguis Fisher River Flood Protection Agreement.

COSTS RELATED TO CAPITAL ASSETS

The department expended the annual amortization costs of all completed assets based on the useful life of each asset. Assets purchased or constructed in 2007/08 were expended at one-half the annual amortization rate. The amortization expense also included the portion of corporate information technology projects attributable to the department.

Table CI.1
25.5 Costs Related to Capital Assets

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
(a) Desktop Services					
(1) Amortization Expense - Transition	22.2		22.2	0.0	
(2) Enterprise Software Licenses	38.5		38.5	0.0	
(b) General Assets					
(1) Amortization Expense	210.7		204.9	5.8	
(2) Interest Expense	45.7		45.1	0.6	
Total Sub-Appropriation	317.1		310.7	6.4	

PART B – CAPITAL INVESTMENT

Capital Investment – General Assets provides for the refurbishment and upgrade of facilities and the acquisition of machinery and equipment.

Equipment purchases in 2007/08 totaled \$231.8 and included:

• 18' Boat, motor and trailer	\$ 19.3
• Snowmobile	10.4
• Kubota tractor/blower	57.7
• File cabinet system	25.8
• Large format printer	26.3
• Standalone system and accessories	11.6
• Topographic survey instrument	80.7
	<hr/>
	\$ 231.8

Table CI.2
Part B.25 General Assets

Expenditures by Sub-appropriation	Actual 2007/08 \$(000)	FTE's	Estimate 2007/08 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
B.25	231.8		244.3	12.5	
Total Sub-Appropriation	231.8		244.3	12.5	

SUSTAINABLE DEVELOPMENT ACTIVITIES AND ACCOMPLISHMENTS

Manitoba Water Stewardship exemplifies commitment to the Sustainable Development Principles of Stewardship. The department in its Vision, Mission and Values statements articulates clearly its commitment to ensuring today's decisions are balanced with tomorrow's consequences, recognizing that Manitobans are caretakers of water resources for the benefit of present and future generations.

Activities of Manitoba Water Stewardship that incorporate or apply Sustainable Development Principles and Guidelines:

The Water Protection Act was proclaimed in force on January 1, 2006, the first act of its kind in Canada. *The Water Protection Act* represents the single most significant action of the Department to ensure the Principles and Guidelines of Sustainable Development are incorporated into and applied in its everyday operations. *The Water Protection Act* embodies and articulates Sustainable Development Guidelines and Principles in establishing the legislative framework around which Manitoba's water resources will be protected. It provides a key legislative and policy mandate for the department.

SUSTAINABLE DEVELOPMENT PRINCIPLES:

1. Integration of Environmental and Economic Decisions:

- *Economic decisions should adequately reflect environmental, human health and social effects.*
- *Environmental and health initiatives should adequately take into account economic, human health and social consequences.*

Manitoba Water Stewardship staff reviewed proposed licenses, permits and development plans under *The Environment Act*, municipal and planning district development plans and amendments, and municipal subdivisions to ensure the integrity and sustainability of Manitoba's drinking water, commercial water resources, fisheries, wetlands and riparian areas. Ensuring that Manitobans and their investments are protected from water related hazards and shortages are an important component of the licensing and review process.

2. Stewardship:

- *Water and fish resources should be managed for the equal benefit of present and future generations.*
- *Manitobans are caretakers of our water and fish resources for the benefit of present and future generations.*

The Office of Drinking Water provides a strong stewardship function in managing drinking water systems throughout Manitoba for today and into the future. This is accomplished through regulatory development and enforcement, emergency investigations, monitoring, technical support, testing services and operator guidance and support.

The maintenance and operation of drainage systems and activities, dams and dikes is a critical stewardship function of Manitoba Water Stewardship. The proper construction and operation of infrastructure for the benefit of individuals, communities, industry and the environment is essential.

Working together with irrigators, high levels of compliance on water use reporting has occurred. This ensures reliable water use records and an enhanced ability to manage these resources sustainably into the future.

3. Shared Responsibility and Understanding:

- *Manitobans should acknowledge responsibility for sustaining water and fish resources with each being accountable for decisions and actions in a spirit of partnership and cooperation.*
- *Manitobans share a common economic, physical and social environment.*
- *Manitobans should understand and respect differing economic and social views, values, traditions and aspirations.*

- *Manitobans should consider the aspirations, needs and views of the people of the various geographical regions and ethnic groups in Manitoba, including aboriginal peoples, to facilitate equitable management of Manitoba's common resources.*

The Office of Drinking Water shares the responsibility to provide safe drinking water with water system owners and operators across Manitoba. This cooperation is demonstrated through outreach activities, presentations, and feedback on annual water system operations.

Manitoba Water Stewardship has undertaken the Southeast Regional Groundwater Management Planning process where departmental staff are working in conjunction with 54 external stakeholder agencies and 15 science/government stakeholder agencies to compile a management plan for the groundwater resources in southeast Manitoba.

Water control infrastructure (waterway and drainage systems, dams, crossings, etc.) affects the well-being and sustainability of many communities and individuals. Sharing technical expertise with municipalities and conservation districts, collaborating with local technical advisory groups and cost-sharing developments are examples of the department's cooperative efforts.

Manitoba Water Stewardship continues to work with various stakeholders in the establishment of basin, watershed and aquifer management plans, and the provision of administrative assistance to several management advisory boards.

The department relies on water level and stream flow data collection under the Canada-Manitoba Hydrometric Agreement for operation of water control works, flood forecasting and water management investigations and hydrologic studies.

The department supports and facilitates the work of the Lake Winnipeg Stewardship Board and the Lake Manitoba Stewardship Board.

Manitoba Water Stewardship and Indian and Northern Affairs Canada entered into the Canada-Manitoba Partnership Agreement on Fisher River Flood Protection in August 2005. The Agreement enables Canada and Manitoba to implement, in partnership with Peguis First Nation, Fisher River First Nation, the communities of Dallas/Red Rose, Harwill, and Fisher Bay, and the Rural Municipality of Fisher, a program to protect people and property in the Fisher River watershed from the ongoing risk of flooding.

The department continues to work with First Nations and other stakeholders to develop fisheries management approaches that accommodate constitutional obligations and other stakeholder interests.

Departmental regional staff updated a management plan for Dauphin Lake in partnership with Western Regional Tribal Council in an attempt to co-manage harvest of walleye in Dauphin Lake.

The West Interlake Conservation District proposal was drafted and approved by six municipal governments interested in sharing responsibility for land and water management in the West Interlake watershed. In cooperation with Manitoba Water Stewardship, the Mid Assiniboine River and Tiger Hills conservation districts completed a proposal to amalgamate to form the new Assiniboine Hills Conservation District in order to increase programming efficiencies.

4. Prevention:

- *Manitobans should anticipate, and prevent or mitigate, significant adverse economic, environmental, human health and social effects of decisions and actions, having particular careful regard to decisions whose impacts are not entirely certain but which, on reasonable and well-informed grounds, appear to pose serious threats to the economy, the environment, human health and social well-being.*

Existing ongoing licensing systems for water allocation, development and drainage all enhance the ability of Manitoba Water Stewardship to anticipate, prevent or mitigate significant adverse effects of activity on drinking water, commercial water sources, fisheries, wetlands and riparian areas.

The Red River Floodway Act was proclaimed, initiating the expansion of the Red River Floodway to provide protection to Winnipeg from a 1 in 700 year flood event.

Manitoba Water Stewardship continued to work toward protection of endangered aquatic species in Manitoba by working with the federally appointed Committee on the Status of Endangered Wildlife in Canada (COSEWIC), and cooperating with Fisheries and Oceans Canada to develop recovery/management plans to address aquatic species of concern under the federal *Species at Risk Act*.

The department continued to collaborate with other provincial and federal counterparts on public education and awareness of aquatic invasive species issues. In 2007/08, this included a major public awareness program (static displays, fact sheets, television and radio items) directed at the rusty crayfish.

The department operated an ambient monitoring network on major streams, lakes and recreational beaches, assisted by volunteers, regional personnel and organizations, such as conservation districts. Over 50 sites across Manitoba were regularly monitored for up to 100 chemical parameters, and 60 beaches were monitored, with information posted on the department's website.

In March 2007, two new regulations came into force under *The Drinking Water Safety Act*. Within these new regulations are the requirements for all utilities to apply for, and comply with an operating licence. Within this licence are operating and monitoring requirements to minimize any potential risk to the public health resulting from the operation of the facility. Further to this to mitigate long term adverse economic impacts, utilities are required to carry out once every five years, an engineering assessment of their water treatment works. The intent of the assessment is to identify deficiencies in the infrastructure. The utility is then required to develop a compliance plan to address the deficiencies in a timely manner to ensure the public health is protected and satisfactorily address the economic impact of the required work.

Manitoba's 18 conservation districts offer over 40 preventative best management practice incentive programs to support sustainable land use and water management protecting thousands of hectares of sensitive lands and waters.

5. Conservation and Enhancement:

- *Maintain the ecological processes, biological diversity and life-support systems of the environment.*
- *Harvest renewable resources on a sustainable yield basis.*
- *Make wise and efficient use of renewable and non-renewable resources.*
- *Enhance the long-term productive capability, quality and capacity of natural ecosystems.*

The present water allocation licensing process and associated hydrological yield analysis has resulted in significant numbers of applications being placed on permanent hold on aquifers where sustainable yields are fully allocated.

In annually permitting and licensing water use and fish harvest, the department ensures that the sustainability of those resources is not compromised.

The department continued to fund a Beneficial Management Practice Top-Up Incentive Program in partnership with the Canada-Manitoba Farm Stewardship Program, which is administered by Prairie Farm and Rehabilitation Administration, and Manitoba Agriculture, Food, and Rural Initiatives. This partnership operates until March 31, 2008.

A Riparian Easements Delivery Program continued to operate in partnership with Manitoba Habitat Heritage Corporation to protect water sensitive lands, including wetlands, riparian areas and fragile landscapes, through Conservation Easement Agreements.

Conservation District Secretariat Staff worked with 18 conservation districts in the development and delivery of water and soil conservation programs and projects.

The Fisheries Enhancement Fund (formerly the Fisheries Enhancement Initiative) has funded 327 projects directed at enhancing fish populations and their habitat as well as funding educational opportunities. In

2007/08, the FEF funded 35 projects totaling \$575,250 as follows: fisheries research – 9 projects for \$191,600; stock assessment and monitoring – 6 projects for \$129,200; fish habitat rehabilitation/enhancement – 3 projects for \$32,700; fisheries outreach/education – 16 projects for \$196,750; and fisheries development – 1 project for \$25,000.

6. Rehabilitation and Reclamation:

- *Endeavour to repair damage to or degradation of the environment.*
- *Consider the need for rehabilitation and reclamation in future decisions and actions.*

The department continued to provide co-ordination and planning assistance for a number of watershed/stream restoration projects in Manitoba. An integrated planning approach joins local stakeholder groups and agencies in restoring the health and functions of watersheds. Integrated watershed management plans are underway in the following watersheds: Shell River, Arrow-Oak River, Assiniboine-Birdtail River, Little Saskatchewan River, Seine River, LaSalle River, and the Icelandic River and Washow Bay Creek.

7. Global Responsibility:

- *Manitobans should think globally when acting locally, recognizing that there is economic, ecological and social interdependence among provinces and nations, and working cooperatively, within Canada and internationally, to integrate economic, environmental, human health and social factors in decision-making while developing comprehensive and equitable solutions to problems*

The Office of Drinking Water participated in national level committees to ensure the Canadian Drinking Water Quality Guidelines benefit Manitobans as well as all Canadians. Participation in watershed and basin planning ensures that drinking water issues that transcend local, regional and provincial boundaries are addressed.

The department participated in and supported the Red River Basin Commission dedicated to the environmental, economic and social sustainability of the Red River Valley.

Manitoba Water Stewardship continued its partnership agreement with Natural Resources Canada to implement the National Hydrographic Network.

The Water Science and Management Branch participated in the Canadian Council of Ministers of the Environment's Water Quality Task Group to ensure that Canadian Water Quality Guidelines for the protection of aquatic life and uses such by agriculture benefit Manitobans as well as all Canadians. The Water Quality Task Group also works to examine other national issues with respect to water quality and the Department's participation ensures that Manitoba interests are represented.

The department participated on a number of inter-provincial and international boards and committees directed at the sustainable management of shared waters within the Hudson Bay Drainage Basin, including the Prairie Provinces Water Board, the Red River Basin Commission, and the Lake of the Woods Control Board.

SUSTAINABLE DEVELOPMENT GUIDELINES

1. Efficient Uses of Resources:

- *Encouraging and facilitating development and application of systems for proper resource pricing, demand management and resource allocation together with incentives to encourage efficient use of resources.*
- *Employing full-cost accounting to provide better information for decision makers.*

Manitoba Water Stewardship participated on a sub-committee of the Canadian Council of Ministers of the Environment on Economic Instruments and Demand Side Management to support the efficient use of water.

2. Public Participation:

- *Establishing forums which encourage and provide opportunity for consultation and meaningful participation in decision-making processes by Manitobans.*

- Endeavouring to provide due process, prior notification, and appropriate and timely redress for those adversely affected by decisions and actions.
- Striving to achieve consensus amongst citizens with regard to decisions affecting them.

Technical advisory committees and community meetings were held to work to alleviate flooding on several First Nations lands. Such forums facilitated the identification of solutions that would sustain communities into the future.

Discussions progressed with four new water planning authorities were designated as per *The Water Protection Act* to develop, in consultation with stakeholders, watershed management plans for the protection and management of surface and ground water resources. Manitoba Water Stewardship staff supported ongoing integrated watershed management plans with six water planning authorities.

Manitoba Water Stewardship established the Manitoba Water Council to provide Ministerial advice on policies, programs, plans and legislation needed to achieve the department's vision of "the best water for all life and lasting prosperity". The Council will help build a broad-based consensus among Manitobans on sustainable solutions for water protection and water management.

Consultations with Manitobans as part of the process for developing *The Phosphorus Reduction Act* and amendments to the Nutrient Management Regulation. A series of open houses were held in five communities across the province in September 2007. An overview of the information obtained from the open houses is summarized in a report entitled "What You Told Us - Proposed Approaches to Reducing Nutrient Contributions from Urban and Rural Residential Sources.

3. Access to Information:

- Encouraging and facilitating the improvement and refinement of economic, environmental, human health and social information.
- Promoting the opportunity for equal and timely access to information by all Manitobans.

Manitoba Water Stewardship provides information covering all aspects of the water resources to the public through the department's website. Specific information is provided through open houses and public meetings.

Departmental staff participated in *Manitoba Envirothon* by working with the test-writing committee, preparing questions, and assisting in the field day and oral components. *Envirothon* is an annual Olympic-style academic and environmental program. High school students (Senior I to IV) are tested in four discipline areas (aquatics, forestry, soils, and wildlife) and the annual theme.

Manitoba Water Stewardship continued to work in partnership with MB Education and volunteer teachers to develop, expand, and deliver on-line, grade-specific lessons and activities that promote sustainable fisheries development focused on the Kindergarten to Grade 12 Science curriculum.

A total of 192 flood sheets were issued in 2005 for various rivers from the U.S. boundary to the Churchill River. These daily reports were also posted on the department's web site.

Whiteshell Fish Hatchery Visitor Centre gave tours to approximately 3,000 people from June to the September long weekend. Interpretative exhibits include information on species reared at the hatchery, life stages of fish, how water is used, a history of the hatchery, aquatic invasive species, and ecosystem interaction.

Daily updates on recreational water quality at beaches across Manitoba were provided on the department's web site. News releases were issued every Friday during the recreational season to provide information on recent test results, advisory signs, and how Manitobans can protect the beach and themselves.

The Water Quality Management Section developed and distributed updated mercury in fish consumption guidelines to the public and stakeholders through a new brochure and the Manitoba Water Stewardship web site.

4. Integrated Decision Making and Planning:

- *Encouraging and facilitating decision-making and planning processes that are efficient, timely, accountable, and cross-sectoral and which incorporate an inter-generational perspective of future needs and consequences.*

Manitoba Water Stewardship continued to develop the template and model for Integrated Water Planning and Management in Manitoba. This approach will ensure the integration decision making and management of land, water and related resources.

Manitoba Water Stewardship partnered with conservation districts to initiate seven watershed plans. The department and the individual conservation districts signed memorandums of understanding outlining agreement on the process and timeframe to develop a watershed plan and embarked on the planning process, starting with stakeholder meetings and state of the watershed assessments.

In 2007/08 provincial grants totalling \$4.835M were provided to 18 conservation districts to support the Conservation Districts Programs in areas such as water management, soil conservation, water storage, wildlife habitat, preservation of historic resources, recreation, public education, administration and other programs that promote sustainable resource management.

5. Waste Minimization and Substitution:

- *Encouraging and promoting the development and use of substitutes for scarce resources where such substitutes are both environmentally sound and economically viable.*
- *Reducing, reusing, recycling and recovering the products of society.*

6. Research and Innovation:

- *Means encouraging and assisting the researching, development, application and sharing of knowledge and technologies which further our economic, environmental, human health and social well-being.*

The department supported research on Lake Winnipeg through a grant to the Lake Winnipeg Research Consortium for operation of *The Namao* and in kind contributions.

The Water Stewardship Fund provided financial assistance for 18 projects to develop, implement and promote activities and research that maintain or improve the quality and availability of Manitoba's water.

REVENUE AND EXPENDITURE SUMMARIES

Table RE.1
Reconciliation Statement

DETAILS	2007-08 ESTIMATES
Printed Estimates of Expenditure 2007/08	\$31,985.2
2007-08 ESTIMATES	\$31,985.2

Table RE.2**Revenue Summary By Source**

For the year ended March 31, 2008 with comparative figures for the previous fiscal year

Actual 2006/07	Actual 2007/08	Increase (Decrease)	Source	Actual 2007/08	Estimate 2007/08	Variance 2007/08	Expl. No.
OTHER REVENUE:							
295.4	240.0	(55.4)	(a) Fisheries Fees and Sundry	240.0	312.3	(72.3)	1
2,385.7	2,348.0	(37.8)	(b) Licence Sales by Vendors	2,348.0	2,589.1	(241.2)	2
106,340.1	117,323.3	10,983.3	(c) Water Power Rentals	117,323.3	105,000.0	12,323.3	3
217.3	129.7	(87.6)	(d) Water Resources Sundry	129.7	221.2	(91.5)	4
			(e) Drinking Water Fees				
			(f) Reconciliation (Reorg)				
109,238.5	120,041.0	10,802.5	Subtotal	120,041.0	108,122.6	11,918.4	
GOVERNMENT OF CANADA:							
239.3	124.0	(115.3)	Peguis Flood Mitigation GeoConnections Contribution Agreement	124.0	470.0	(346.0)	5
239.3	124.0	(115.3)	Subtotal	124.0	590.0	(466.0)	6
109,477.8	120,165.0	10,687.2	Total	120,165.0	108,712.6	11,452.4	

Explanation Number:

1. Variance is due to lower revenue from Manitoba Hydro for Grand Rapids Hatchery support and less commercial fishing licence sales.
2. Variance is due to fewer angling licences purchased.
3. Variance is due to good water supply conditions and strong domestic and export demands for electricity throughout the year.
4. Variance is due to water usage less than anticipated.
5. Variance is due to revenue recognition based on expenditures incurred and work completed for Peguis Flood Mitigation, which was less than anticipated for 2007/08.
6. Variance is due to timing of revenue recognition, revenue was partially recognized in 2006/07 and balance to be recognized in 2008/09.

Table EX.1
Expenditure Summary

For fiscal year ended March 31, 2008 with comparative figures for the previous year.

Estimate 2007/08	Appropriation	Actual 2007/08	Actual 2006/07	Increase (Decrease)	Expl. Number
25-1 Administration and Finance					
31.0	(a) Minister's Salary	42.1	32.5	9.6	1
	(b) Executive Support				
585.3	Salaries and Employee Benefits	662.2	489.9	172.6	2
200.2	Other Expenditures	96.3	132.3	(35.8)	3
	(c) Administration & Financial Services				
273.1	Salaries and Employee Benefits	292.3	156.2	136.1	4
80.3	Other Expenditures	33.7	20.7	12.8	
	(d) Information Technology Services				
308.6	Salaries and Employee Benefits	324.6	316.1	8.5	
14.4	Other Expenditures	14.6	12.9	1.7	
1,492.9	Total 25-1	1,465.8	1,160.6	305.2	
25-2 Ecological Services					
	(a) Administration				
265.4	Salaries and Employee Benefits	221.4	262.5	(41.1)	
68.5	Other Expenditures	39.1	45.7	(6.6)	
25.0	Grant Assistance	22.9	14.3	8.6	5
276.7	Minor Capital	239.0	244.6	(5.6)	
635.6	Total 25-2a	522.4	567.1	(44.7)	
	(b) Planning and Coordination				
1,563.2	Salaries and Employee Benefits	1,291.9	1,194.3	97.6	
390.8	Other Expenditures	419.8	288.3	131.5	6
1,954.0	Total 25-2b	1,711.7	1,482.6	229.1	
	(c) Water Science and Management				
	(1) Administration				
209.3	Salaries and Employee Benefits	252.8	212.2	40.6	7
167.5	Other Expenditures	121.2	169.3	(48.1)	8
	(2) Groundwater Management				
901.3	Salaries and Employee Benefits	881.7	887.0	(5.3)	
546.0	Other Expenditures	465.6	436.9	28.7	
	(3) Surface Water Management				
689.1	Salaries and Employee Benefits	576.0	539.8	36.2	
166.5	Other Expenditures	168.5	163.0	5.5	
	(4) Water Quality Management				
674.5	Salaries and Employee Benefits	576.2	460.3	115.9	9
780.4	Other Expenditures	634.6	628.9	5.7	
1,454.9	Total 25-2c	1,210.8	1,089.2	121.6	
	(d) Fisheries Branch				
	(1) Administration				
156.9	Salaries and Employee Benefits	102.2	99.6	2.6	
246.0	Other Expenditures	223.8	228.2	(4.4)	
	(2) Aquatic Eco-System Management				
1,144.6	Salaries and Employee Benefits	1,076.9	990.1	86.8	10
191.8	Other Expenditures	186.6	188.3	(1.7)	
	(3) Sport and Commercial Fishing Management				
628.6	Salaries and Employee Benefits	594.1	628.3	(34.2)	

Estimate 2007/08	Appropriation	Actual 2007/08	Actual 2006/07	Increase (Decrease)	Expl. Number
78.2	Other Expenditures	74.6	73.7	0.9	
(4)	Regional Fisheries Resources				
834.9	Salaries and Employee Benefits	875.9	824.8	51.1	
214.5	Other Expenditures	227.2	206.1	21.1	
410.0	(5) Northern Fisherman's Freight Assistance	410.0	410.0	0.0	
600.0	(6) Fisheries Enhancement Fund	591.2	385.3	205.9	11
4,505.5	Total 25-2d	4,362.5	4,034.4	328.1	
	(e) Conservation District and Watershed Assistance				
4,835.0	Conservation District and Watershed Assistance	4,835.0	4,400.0	435.0	12
(425.0)	Less: Recoverable from Rural Economic Development Initiative	(425.0)	(425.0)	0.0	
4,410.0	Total 25-2e	4,410.0	3,975.0	435.0	
15,639.7	Total 25-2	14,683.2	13,556.5	1,126.7	
	25-3 Infrastructure and Operations				
	(a) Administration				
443.5	Salaries and Employee Benefits	478.4	436.3	42.1	
599.3	Other Expenditures	455.0	482.3	(27.3)	
	(b) Flood Forecasting and Flood Response Coordination				
423.6	Salaries and Employee Benefits	260.8	200.4	60.4	13
237.5	Other Expenditures	216.7	9.0	207.7	14
	(c) Water Control Systems Management				
591.8	Salaries and Employee Benefits	526.5	555.6	(29.1)	
82.1	Other Expenditures	103.5	73.0	30.5	15
	(d) Regulatory Services				
	(1) Office of Drinking Water				
1,100.2	Salaries and Employee Benefits	1,069.0	931.4	137.6	16
1,805.8	Other Expenditures	1,191.7	554.9	62.2	17
	(2) Water Control Works and Drainage Licensing				
1,137.8	Salaries and Employee Benefits	900.4	399.1	501.3	18
278.6	Other Expenditures	471.2	246.3	224.9	19
	(3) Water Use Licensing				
1,176.1	Salaries and Employee Benefits	998.9	1,065.1	(66.2)	20
110.1	Other Expenditures	117.8	107.1	10.7	
507.8	(e) Waterway Planning and Operational Services Support	563.5	341.9	221.6	21
8,494.2	Total 25-3	7,353.4	5,402.4	1,951.1	
6,047.7	Water Stewardship Initiatives	4,885.5	4,741.4	144.1	22
6,047.7	Total 25-4	4,885.5	4,741.4	144.1	
	25-5 Costs Related to Capital Assets				
	(a) Desktop Services				
22.2	(1) Amortization Expense – Hardware and Transition	22.2	22.2	0.0	

Estimate 2007/08	Appropriation	Actual 2007/08	Actual 2006/07	Increase (Decrease)	Expl. Number
38.5	(2) Enterprise Software Licenses	38.5	38.4	0.1	
	(b) General Assets				
204.9	(1) Amortization Expense	210.7	157.5	53.2	23
45.1	(2) Interest Expense	45.7	25.9	19.8	24
250.0	Total 25-5	256.4	244.0	73.1	
31,985.2	TOTAL EXPENDITURES	28,705.0	25,104.9	3,025.5	
244.3	B.18 Capital Investments – General Assets	231.8	431.5	(199.7)	25
244.3	TOTAL CAPITAL INVESTMENT	231.8	431.5	(199.7)	

1. In year adjustment for Minister's Salary.
2. Severance and vacation paid out for retirements in 2007/08.
3. Vacant positions resulting in lower operating costs for 2007/08.
4. Vacancies filled in 2007/08.
5. Water management grant assistance was higher in 2007/08.
6. Vacancies filled in 2007/08 for Basin and Aquifer Planning and Watershed and completion of GeoConnections Program in 2007/08.
7. Severance and vacation paid out for retirements in 2007/08.
8. Higher operating costs related to communications charges and software purchases.
9. Vacancies filled in 2007/08.
10. Severance and vacation paid out for retirements and vacancies filled in 2007/08.
11. Higher costs due to increase in 2007/08 budget for the Fisheries Enhancement Initiative programs.
12. Increased costs in 2007/08 for restructuring the Conservation Districts program to include more districts.
13. Vacancies filled in 2007/08.
14. New Branch set up costs in 2007/08.
15. Higher volumes of work on Dam Emergency Preparedness Plans, Conservation District support, Drainage Licensing Support. Also higher communications charges in 2007/08.
16. Vacancies filled in 2007/08.
17. Higher general administration, regional field and lab costs in 2007/08 due to Office of Drinking Water testing activities.
18. Vacancies filled throughout the year for Water Control Works and Drainage Licensing operations.
19. Higher general administration costs as vacancies were filled in 2007/08.
20. Higher vacancy rate in 2007/08.
21. Increased costs in 2007/08 to provide for adjustment to settlement with the Pinaymootang (Fairford) First Nation.
22. Year-over-year differences in project scope and costs, as well as increased funding in 2007/08.
23. Higher amortization costs in 2007/08 due to acquisition of new assets.
24. Higher interest costs in 2007/08 due to acquisition of new assets.
25. Higher capital investment costs in 2006/07 related to Swan Creek Hatchery incubating batteries and generator; and water quality sampling boat.

Table EX.2**FIVE YEAR EXPENDITURE AND STAFFING SUMMARY BY MAIN APPROPRIATION**

for the fiscal years ended March 31, 2004 to March 31, 2008

Main Appropriation	ACTUAL/*ADJUSTED ESTIMATES OF EXPENDITURE						ADJUSTED VOTE		MAIN ESTIMATES	
	2003/2004*		2004/2005*		2005/2006*		2006/2007		2007/2008	
	FTEs	\$ (000s)	FTEs	\$ (000s)	FTEs	\$ (000s)	FTEs	\$ (000s)	FTEs	\$ (000s)
25-1 Administration and Finance	12.00	744.6	16.00	1,153.2	16.00	1,351.6	16.00	1,461.4	16.00	1,492.9
25-2 Ecological Services	119.19	19,164.5	118.19	15,837.2	116.19	16,025.0	108.19	14,464.8	110.19	15,639.7
25-3 Regulatory and Operations	41.50	3,590.4	42.50	5,774.3	41.50	4,493.1	74.12	7,259.4	83.12	8,494.2
25-4 Water Stewardship Initiatives				469.0		2,565.3		5,047.7		6,047.7
25-5 Costs Related to Capital Projects		224.4		213.8		227.7		262.4		310.7
Total Appropriations	172.69	23,723.9	176.69	23,447.5	173.69	24,662.7	198.31	28,495.7	209.31	31,985.2

*Adjusted figures reflect historical data on a comparable basis in those appropriations affected by re-organization, during the years under review.

MANITOBA WATER STEWARDSHIP – PERFORMANCE REPORTING TABLE

The following section provides information on key performance measures for the department for the 2007-08 reporting year. This is the third year in which all Government of Manitoba departments have included a Performance Measurement section, in a standardized format, in their Annual Reports.

Performance indicators in departmental Annual Reports are intended to complement financial results and provide Manitobans with meaningful and useful information about government activities, and their impact on the province and its citizens.

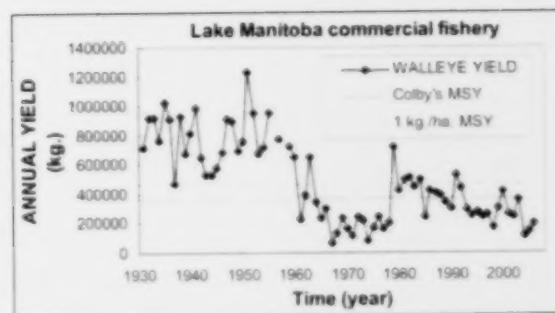
For more information on performance reporting and the Manitoba government, visit www.manitoba.ca/pwinfo.htm

Your comments on performance measures are valuable to us. You can send comments or questions to mbperformance@gov.mb.ca.

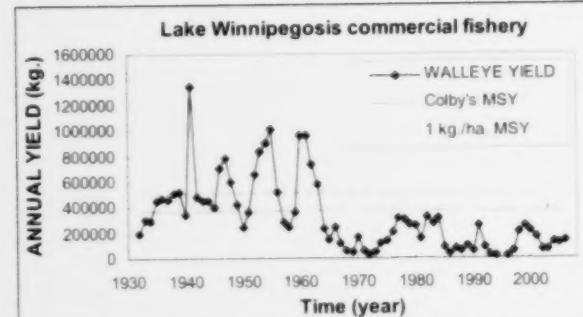
What is being measured and how?	Why is it important to measure this?	Where are we starting from?	What is the most recent available value for this indicator?	What is the trend over time for this indicator?	Comments/recent actions/report links
The status of fish stocks, by comparing commercial production of the most valuable fish species (i.e. walleye) against maximum sustainable yield (MSY) estimates for four large commercial fisheries (Cedar Lake, Lake Manitoba, Lake Winnipeg and Lake Winnipegosis).	<p>It is important to measure the status of these fish stocks because they are an indicator of aquatic ecosystem health and economic opportunity for fishers.</p> <p>It is important to track production of highly sought species against estimated MSY, because the harvest of consistently valuable species is reflective of abundance (less influenced by market factors; i.e. price paid).</p>	<p>The baseline measure for this is the annual MSY for each lake</p> <p>Lake Winnipegosis – 263,320 kgs (walleye)</p> <p>Lake Manitoba – 907,200 kgs (walleye, sauger)</p> <p>Cedar Lake – 496,600 kgs (walleye, sauger, goldeye, whitefish) – tolerance: not more than 300,000 can be walleye</p> <p>Lake Winnipeg – 6,200,000 kgs (walleye, sauger, whitefish)</p>	See Graphs below	<p>Lake Winnipegosis – stocks considered collapsed.</p> <p>Lake Manitoba – production has experienced long term decline.</p> <p>Cedar Lake – recent increases in production reflect five-year closure due to decreased fishery.</p> <p>Lake Winnipeg – production at record levels but high nutrients and invasive species leaves concerns for stability.</p>	<p>Lake Winnipegosis – The Minister has formally responded to the recommendations of the Lake Winnipegosis Management Board and an action plan is under development.</p> <p>Lake Manitoba – a lake stewardship board has been established to review fisheries management plans.</p> <p>Cedar Lake – Recovery of fish stocks is not complete. Fishery continues to be adjusted, in accordance with the management plan implemented in June 2006.</p> <p>Lake Winnipeg – Monitoring efforts on Lake Winnipeg are continuing.</p>

Commercial production and maximum sustainable yield (MSY) on four large Manitoba fisheries.

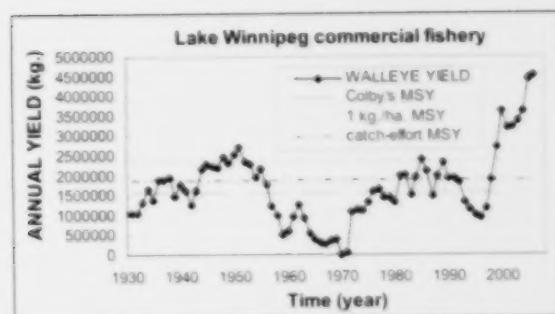
Lake Manitoba



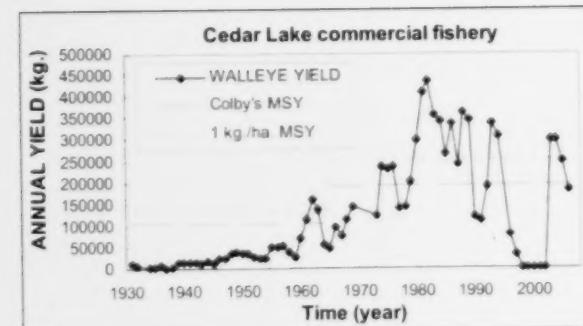
Lake Winnipegosis



Lake Winnipeg



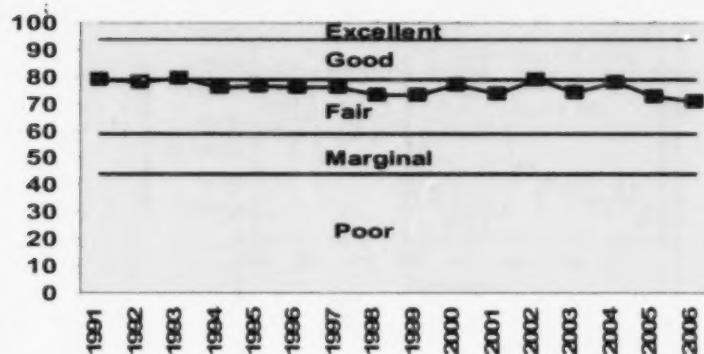
Cedar Lake



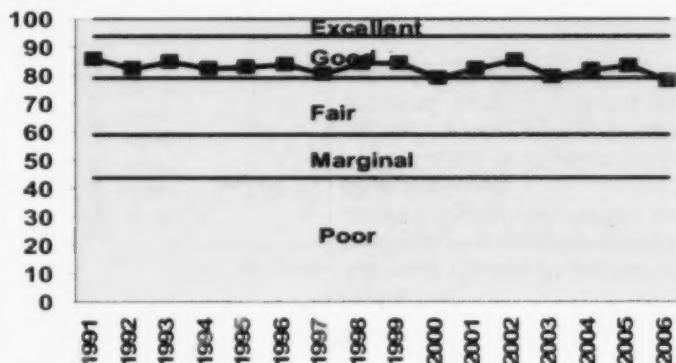
What is being measured and how?	Why is it important to measure this?	Where are we starting from?	What is the most recent available value for this indicator?	What is the trend over time for this indicator?	Comments/recent actions/report links
<p>Water quality in Manitoba, by assessing water quality data using the CCME (Canadian Council of Ministers of the Environment) Water Quality Index.</p>	<p>It is important to measure water quality because we want to protect drinking water, fish and other aquatic life, recreation, and other important water uses.</p>	<p>Water quality has been tested at many rivers, streams and lakes since the early 1970s. The Water Quality Index has been calculated for about 40 to 50 sites since 1991.</p>	<p>The latest data we have is for 2006.</p> <p>Within the Prairie Ecozone, the CCME Water Quality Index Value was 71 or of "fair" quality.</p> <p>Within the Boreal Plains, the CCME Water Quality Index Value was 78 or of "fair" quality.</p> <p>Within the Boreal Shield Ecozone, the CCME Water Quality Index Value was 87 or of "good" quality.</p>	<p>The Water Quality Index in Manitoba has been stable since 1991 (see graphs below).</p>	<p>This Water Quality Index compares a number of important water quality parameters against established standards, objectives, or guidelines. When compared over time, it provides a useful indicator of how water quality may be changing. Annual data from 40 to 50 consistently monitored sites are used in the WQI.</p> <p><i>Excellent:</i> (CCME WQI Value 95-100) - water quality is protected with a virtual absence of threat or impairment; conditions very close to natural or pristine levels. These index values can only be obtained if all measurements are within objectives virtually all of the time.</p> <p><i>Good:</i> (CCME WQI Value 80-94) - water quality is protected with only a minor degree of threat or impairment; conditions rarely depart from natural or desirable levels.</p> <p><i>Fair:</i> (CCME WQI Value 65-79) - water quality is usually protected but occasionally threatened or impaired; conditions sometimes depart from natural or desirable levels.</p> <p><i>Marginal:</i> (CCME WQI Value 45-64) - water quality is frequently threatened or impaired; conditions often depart from natural or desirable levels.</p> <p><i>Poor:</i> (CCME WQI Value 0-44) - water quality is almost always threatened or impaired; conditions usually depart from natural or desirable levels.</p>

CCME Water Quality Index for Manitoba.

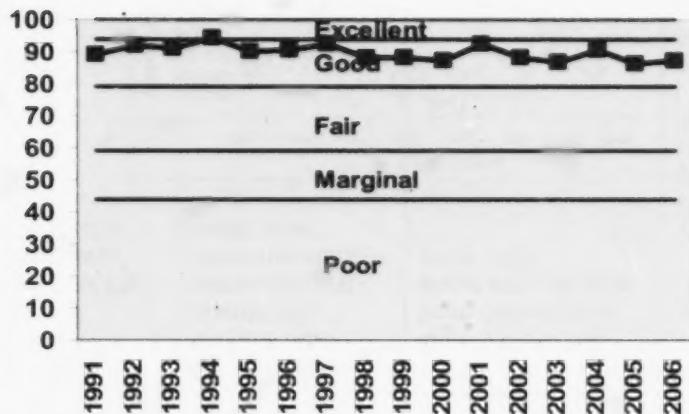
Prairie Waterbody Average
CCME Water Quality Index



Boreal Plains Waterbody Average
CCME Water Quality Index



Boreal Shield Waterbody Average
CCME Water Quality Index



What is being measured and how?	Why is it important to measure this?	Where are we starting from?	What is the most recent available value for this indicator?	What is the trend over time for this indicator?	Comments/recent actions/report links
The effectiveness of our flood risk management in vulnerable communities by measuring the number of existing Red River Valley homes and communities that are protected to the "1997 plus 2 feet" flood protection level.	It is important to measure the effectiveness of flood risk management, because Manitobans face risks from both surplus and scarcity of water, which impacts economic prosperity and human health and security.	<p>The baseline measure for this is the number of buildings and communities protected to the "1997 plus 2 feet" flood level in 1995/96.</p> <p>600 homes, farms and businesses were so protected by 1995/96.</p> <p>Four communities, or significant portions of those communities, were so protected by 1995/96, while others were protected to a lower standard.</p>	<p>Since 1997, 1,860 homes, farms, and businesses in the Red River Valley were individually flood protected to the "1997 plus 2 feet" flood level, resulting in about 97 per cent of such developments being protected.</p> <p>In addition, 14 communities in the Red River Valley have been protected to the "1997 plus two feet" flood level.</p>	Improving each year.	<ul style="list-style-type: none"> The Water Resources Administration Act requires that new development within the Red River valley must comply with the "1997 plus 2 foot" flood protection level. Ralls Island flood protection works planning is complete. Flood pump capacity has been increased in the Red River Valley at Rosenort with a new pump station, and a new upgraded Mile 14 Pump station planned for The Pas is currently being designed in-house with construction expected to commence 2009. Upgraded controls were designed and installed at The Pas Pump station to increase pumping capacity under certain conditions. Pump station trash racks have been designed to increase worker safety and decrease pump station down time. An enhanced ice jam mitigation program has been developed that includes the purchase of a second Amphibex. Within the past year, modifications and repairs were completed on the existing Amphibex and investigations were conducted as to the effectiveness of ice cutting for mitigating ice jams, reducing flood risks. Existing flood risk mapping is being assessed and updated to identify properties at risk. Joint studies with federal government to increase the capability of the Shellmouth Dam and Reservoir are underway and are in the environmental review stage. New piezometers have been installed to monitor the safety of the structure. Red River Floodway expansion is on target with channel work to be completed

What is being measured and how?	Why is it important to measure this?	Where are we starting from?	What is the most recent available value for this indicator?	What is the trend over time for this indicator?	Comments/recent actions/report links
					<p>by March 31, 2009.</p> <ul style="list-style-type: none"> • For springs of 2006, 2007 and 2008, there were no dike failures and all dikes functioned as designed. Unstable river embankments at St. Jean and Emerson that may threaten the dikes have had slope indicators installed to monitor slope movement. • Operation of Shellmouth Dam and Portage Diversion minimized flooding along the Assiniboine River in 2007 and prevented flooding in 2008. • Operation of the Red River Floodway reduced flood peaks within Winnipeg for 2005 and 2006.

What is being measured and how?	Why is it important to measure this?	Where are we starting from?	What is the most recent available value for this indicator?	What is the trend over time for this indicator?	Comments/recent actions/report links
<p>The environmental footprint related to water use and the effectiveness of our water awareness programs in Manitoba by measuring per capita water consumption for both industrial and domestic uses (Winnipeg, Brandon and Portage).</p> <p>Currently this is only a measure of our urban footprint and urban user awareness.</p>	<p>It is important to measure our environmental footprint and effectiveness of awareness programs because</p> <ul style="list-style-type: none"> • we want to reduce our environmental footprint; • per capita water usage has an impact on our infrastructure needs; • intensity of use of water is a key environmental indicator (Organization for Economic Cooperation and Development). 	<p>Baseline measure for overall water consumption for the City of Winnipeg is 495.2 l/c/d for 1988.</p>	<p>Per capita water use for the City of Winnipeg for 2007 was 333.8 litres/per capita/per day (l/c/d) (combined residential, commercial/industrial and loss).</p> <p>Per capita water use for the City of Portage la Prairie for 2005 was 969 l/c/d, (all uses including Simplot and McCains plants' 583 l/c/d); 678 l/c/d commercial /industrial; 242 l/c/d residential; 48 l/c/d loss.</p> <p>Per capita water use for the City of Brandon for 2006 438.6 l/c/d; 240.8 l/c/d residential; 175 l/c/d for commercial/industrial; 43 l/c/d loss.</p>	<p>The trend in overall water consumption (both residential and commercial) for the City of Winnipeg has been steadily declining from a high of 495.2 l/c/d in 1988, to 333.8 l/c/d in 2007.</p> <p>No trends in overall water consumption for Brandon or Portage la Prairie are available at this time.</p>	<p>The Organization for Economic Cooperation and Development, in their reference paper <i>OECD Environmental Indicators – Development, Measurement and Use</i>, identifies the intensity of use of water as a key environmental indicator. This indicator links with national and other international initiatives.</p> <p>Environment Canada and other provinces identify and track water use as a measure of effectiveness of programs and activities to educate and inform the public of the importance and value of water.</p> <p>While this is currently only a measure of our urban water use and awareness, we will work towards expanding this measure to include all of Manitoba.</p> <p>With future water efficiency programs/measures that Manitoba Water Stewardship, in cooperation with Manitoba Science, Technology, Energy and Mines, is implementing, it is expected that there will be additional reductions in water usage.</p>

What is being measured and how?	Why is it important to measure this?	Where are we starting from?	What is the most recent available value for this indicator?	What is the trend over time for this indicator?	Comments/recent actions/report links
Manitoba's 400 public water supply systems that service approximately 80% of Manitoba residents (the remainder of the population is serviced primarily by private wells or falls within federal jurisdiction, e.g., First Nations).	<p>It is important to measure the safety of Manitoba's drinking water to minimize the risks to public health through consuming water that may contain:</p> <ul style="list-style-type: none"> • bacteria, virus or protozoa that may cause illness and; • chemical contaminants which may cause negative health outcomes such as increased risk of cancer. <p>It is important to measure the disinfectant (typically chlorine) concentrations in drinking water to ensure that adequate disinfection is taking place to ensure the safety of the water</p>	<p>The baseline measure of public water systems in Manitoba that comply with regulatory testing, report submission, and water quality standard requirements was 72% in 2003. The Office of Drinking Water compliance monitoring program was initiated that year.</p>	<p>The most recent available value for compliance with regulatory testing, report submission and water quality standard requirements was 85% in 2006.</p> <p>The 85% value represents the compliance associated with the 400 public water supply utilities many of which are small and may lack the resources to maintain compliance.</p> <p>From a population perspective, >95% of the population serviced by a public water system receive water from a utility that is in compliance >95% of the time.</p> <p>Approximately 10% of Manitobans use privately-owned wells and 5% of Manitobans reside on First Nations lands.</p>	<p>Between 2003 and 2006, the percentage of compliance improved because of the increased presence (new hirings) of drinking water officers in the field providing regulatory and technical service.</p> <p>In the future compliance may diminish slightly as officers discover previously unknown smaller systems that lack the financial resources to achieve compliance.</p> <p>Public water systems are being issued licences under the DWSA with more stringent operational and monitoring requirements. As the basis by which compliance is determined is</p>	<p>For more information, see the Office of Drinking Water web site. http://www.gov.mb.ca/waterstewardship/odw/index.html</p> <p>Technical documents are posted on the web site. An Annual Report is required under <i>The Drinking Water Safety Act</i>.</p> <ul style="list-style-type: none"> • Drinking water safety is protected through the use of construction permits and operating licences for water suppliers, scheduled and non-scheduled inspection of facilities, scheduled quality monitoring and ongoing utility and public education. • Licencing and permitting ensures that minimum engineering and construction standards are met or exceeded. • Inspections ensure that minimum operational performance and water quality standards are met by utilities and, that there is ongoing public reporting and accountability. • All of the activities focus on the importance of public health protection through the assurance of water supply quality and reliability and maintain public confidence.
The provincial public systems are regulated to ensure compliance with: bacteriological testing schedules, bacteriological water quality standards, chlorine residual testing schedules, and chlorine residual standards.					
Testing frequencies and acceptable					

What is being measured and how?	Why is it important to measure this?	Where are we starting from?	What is the most recent available value for this indicator?	What is the trend over time for this indicator?	Comments/recent actions/report links
<p>limits are established by Health Canada's "Guidelines for Canadian Drinking Water Quality" and provincial standards. The frequency of compliance with the above factors is measured to indicate the percentage of systems that are meeting regulatory requirements.</p>	<p>throughout the piping network.</p>			<p>expanding, it is expected that there will be a decline in the percentage of utilities in compliance.</p> <p>For semi-public systems, testing schedules have become enforceable as of March 1, 2008.</p>	

GESTION DES RESOURCES HYDRIQUES MANITOBA – TABLEAU D'INFORMATION SUR LE RENDEMENT 2007-2008

La section suivante offre des renseignements sur les principaux indicateurs de mesure du rendement du Ministère pour l'année de rapport 2007-2008. Pour la troisième année consécutive, tous les ministères du gouvernement manitobain ont inclus une section d'information sur le rendement, dans un format normalisé, dans leurs rapports annuels.

Les indicateurs de rendement qui figurent dans les rapports annuels des ministères ont pour objectif de fournir à la population du Manitoba, en complément des résultats financiers, des renseignements pertinents et utiles sur les activités du gouvernement et sur leurs incidences sur la province et ses citoyens.

Pour plus d'information sur les rapports de rendement du gouvernement manitobain, visitez le site www.manitoba.ca/performance.

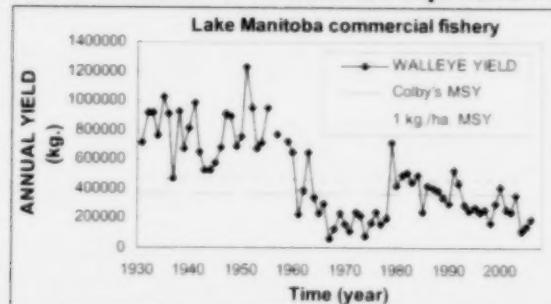
Vos commentaires sur la mesure du rendement nous sont précieux. Veuillez faire parvenir vos commentaires et vos questions par courriel à l'adresse mbperformance@gov.mb.ca.

Indicateur et méthode utilisée	Importance de l'indicateur	Point de départ	Valeurs les plus récentes	Tendance à long terme	Notes, mesures récentes ou liens vers des rapports
La situation des stocks de poissons, mesurée d'après une comparaison de la production commerciale des espèces les plus précieuses (p. ex., le doré jaune) avec le rendement équilibré maximal (REM) prévu pour quatre importantes pêcheries commerciales (lac Cedar, lac Manitoba, lac Winnipeg et lac Winnipegosis).	Il est important de mesurer la situation des stocks de poissons, car elle constitue un indicateur de la santé de l'écosystème aquatique ainsi que des possibilités économiques des pêcheurs.	La mesure de référence utilisée ici est le rendement équilibré maximal (REM) de chacun des lacs.	Voir les graphiques ci-après.	<p>Lac Winnipegosis – On constate un effondrement des stocks.</p> <p>Lac Manitoba – La production diminue depuis longtemps.</p> <p>Lac Cedar – Les récentes hausses dans la production sont le résultat de la fermeture du lac pendant cinq ans à la suite d'une réduction de la pêche.</p> <p>Lac Winnipeg – La production atteint des niveaux sans précédent, mais la grande quantité</p>	<p>Lac Winnipegosis – Le ministre a donné sa réponse officielle aux recommandations du Conseil de gestion du lac Winnipegosis et un plan d'action est en cours d'élaboration.</p> <p>Lac Manitoba – Un conseil de gérance du lac a été mis sur pied pour examiner les plans de gestion des pêches.</p> <p>Lac Cedar – Le rétablissement des stocks de poissons n'est pas terminé. On continue d'adapter la pêche, en conformité avec le nouveau plan de gestion mis en œuvre en juin 2006.</p> <p>Lac Winnipeg – La surveillance du lac Winnipeg se poursuit.</p>

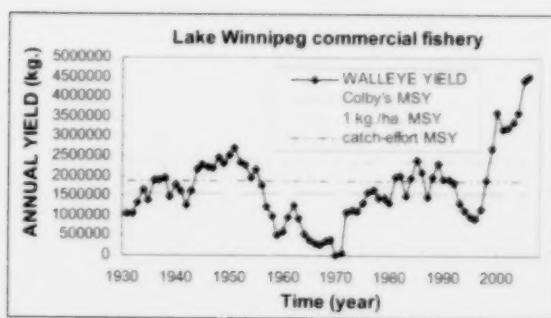
<i>Indicateur et méthode utilisée</i>	<i>Importance de l'indicateur</i>	<i>Point de départ</i>	<i>Valeurs les plus récentes</i>	<i>Tendance à long terme</i>	<i>Notes, mesures récentes ou liens vers des rapports</i>
	signe d'abondance (elle est moins influencée par les facteurs du marché, comme le prix déboursé).	6 200 000 kg (doré jaune, doré noir, corégone)		d'éléments nutritifs et d'espèces envahissantes menacent l'équilibre.	

Production commerciale et rendement équilibré maximal (REM) de quatre grandes pêcheries du Manitoba

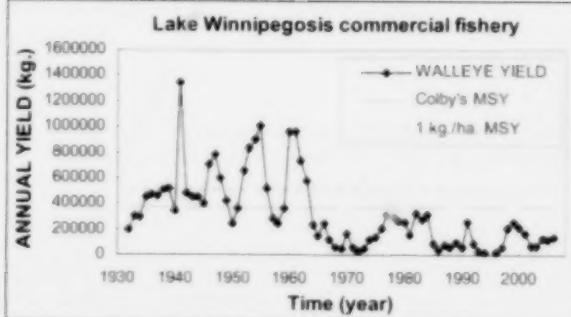
Lac
Manitoba



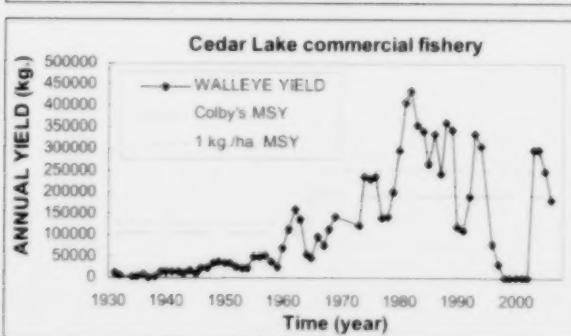
Lac
Winnipeg



Lac
Winnipegosis



Lac Cedar



Lac Manitoba

Lake Manitoba commercial fishery = Pêche commerciale du lac Manitoba
 ANNUAL YIELD (kg.) = RENDEMENT ANNUEL (en kg)
 WALLEYE YIELD = RENDEMENT DU DORÉ JAUNE
 Colby's MSY = REM de Colby
 1 kg./ha. MSY = REM 1 kg/ha
 Time (year) = Temps (année)

Lac Winnipeg

Lake Winnipeg commercial fishery = Pêche commerciale du lac Winnipeg
 ANNUAL YIELD (kg.) = RENDEMENT ANNUEL (en kg)
 WALLEYE YIELD = RENDEMENT DU DORÉ JAUNE
 Colby's MSY = REM de Colby
 1 kg./ha. MSY = REM 1 kg/ha
 catch-effort MSY = REM de l'effort de pêche
 Time (year) = Temps (année)

Lac Winnipegosis

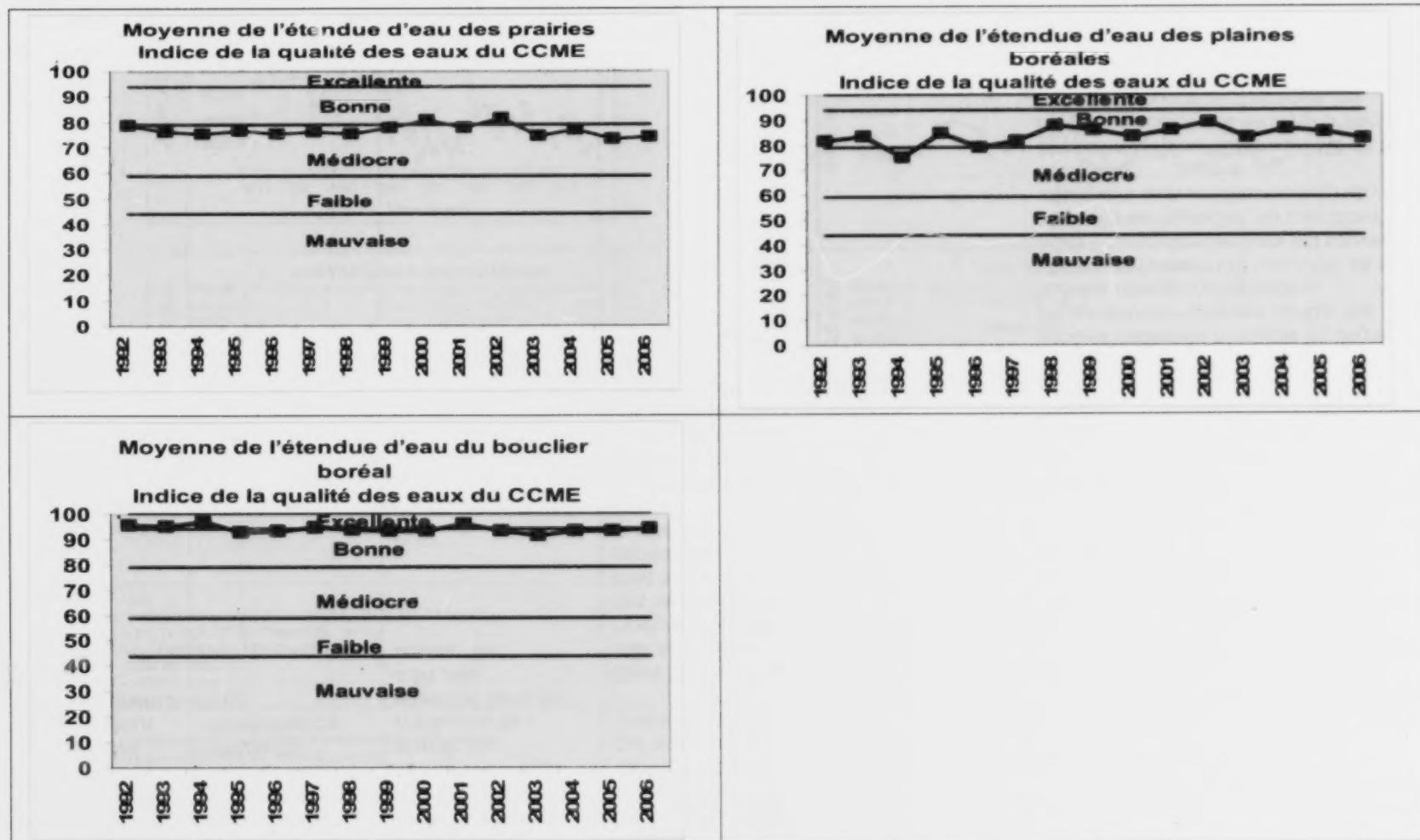
Lake Winnipegosis commercial fishery = Pêche commerciale du lac Winnipegosis
 ANNUAL YIELD (kg.) = RENDEMENT ANNUEL (en kg)
 WALLEYE YIELD = RENDEMENT DU DORÉ JAUNE
 Colby's MSY = REM de Colby
 1 kg./ha. MSY = REM 1 kg/ha
 Time (year) = Temps (année)

Lac Cedar

Cedar Lake commercial fishery = Pêche commerciale du lac Cedar
 ANNUAL YIELD (kg.) = RENDEMENT ANNUEL (en kg)
 WALLEYE YIELD = RENDEMENT DU DORÉ JAUNE
 Colby's MSY = REM de Colby
 1 kg./ha. MSY = REM 1 kg/ha
 Time (year) = Temps (année)

Indicateur et méthode utilisée	Importance de l'indicateur	Point de départ	Valeurs les plus récentes	Tendance à long terme	Notes, mesures récentes ou liens vers des rapports
La qualité de l'eau au Manitoba, mesurée à partir des données servant à établir la qualité des eaux du CCME (Conseil canadien des ministres de l'environnement).	Il est important de mesurer la qualité de l'eau si l'on veut protéger l'eau potable, les poissons et les autres formes de vie aquatique, les loisirs et d'autres utilisations importantes de l'eau.	La qualité de l'eau d'un grand nombre de rivières, de ruisseaux et de lac est analysée depuis le début des années 1970. L'indice de la qualité des eaux est établi d'après les prélèvements effectués dans 40 à 50 sites depuis 1991.	Les données de 2006 sont les dernières données dont on dispose. Dans l'écozone des prairies, l'indice de la qualité des eaux du CCME était de 71, ce qui représente une qualité « passable ». Dans l'écozone des plaines boréales, l'indice de la qualité des eaux du CCME était de 78, ce qui représente une qualité « passable ». Dans l'écozone du bouclier boréal, l'indice de la qualité des eaux du CCME était de 87, ce qui représente une « bonne » qualité.	Au Manitoba, l'indice de la qualité des eaux demeure stable depuis 1991 (voir les graphiques ci-après).	<p>L'indice de la qualité des eaux compare différents paramètres essentiels de la qualité de l'eau à des normes établies, à des objectifs ou à des lignes directrices. Évalué sur une longue période, il constitue un indicateur utile de l'évolution de la qualité de l'eau. L'indice est établi à partir des données annuelles recueillies de façon constante dans 40 à 50 sites.</p> <p>Excellent : (Valeur IQE du CCME de 95 à 100) – La qualité des eaux est protégée; elle n'est pratiquement pas menacée ou dégradée; les conditions sont très proches de l'état naturel ou vierge. Ces valeurs-indices ne sont attribuables que si la totalité des mesures correspond presque toujours aux objectifs.</p> <p>Bonne : (Valeur IQE du CCME de 80 à 94) – La qualité des eaux est protégée; elle est faiblement menacée ou dégradée; les conditions s'éloignent rarement des niveaux naturels ou désirables.</p> <p>Passable : (Valeur IQE du CCME de 65 à 79) – La qualité des eaux est généralement protégée; elle est occasionnellement menacée ou dégradée; les conditions s'éloignent parfois des niveaux naturels ou désirables.</p> <p>Médiocre : (Valeur IQE du CCME de 45 à 64) – La qualité des eaux est souvent menacée ou dégradée; les conditions s'éloignent souvent des niveaux naturels ou désirables.</p> <p>Mauvaise : (Valeur IQE du CCME de 0 à 44) – La qualité des eaux est presque toujours menacée ou dégradée; les conditions s'éloignent généralement des niveaux naturels ou désirables.</p>

Indice de la qualité des eaux du CCME pour le Manitoba



Indicateur et méthode utilisée	Importance de l'indicateur	Point de départ	Valeurs les plus récentes	Tendance à long terme	Notes, mesures récentes ou liens vers des rapports
L'efficacité de la gestion des risques d'inondation dans les collectivités vulnérables, mesurée d'après le nombre de domiciles et de collectivités de la vallée de la rivière Rouge élevés à un niveau correspondant à celui des inondations de 1997, plus 2 pieds.	Il est important de mesurer l'efficacité de la gestion des risques d'inondation, car les Manitobains peuvent être victimes tant de la surabondance de l'eau que de sa rareté, deux situations qui nuisent à la prospérité économique ainsi qu'à la santé et à la sécurité de la population.	La mesure de référence utilisée ici correspond au nombre de bâtiments et de collectivités élevés à un niveau correspondant à celui des inondations de 1997, plus 2 pieds, en 1995-1996. Six cents domiciles, fermes et commerces étaient à ce niveau en 1995-1996. Quatre collectivités ou une grande partie de celles-ci étaient à ce niveau en 1995-1996, tandis que les autres étaient situées à un niveau inférieur.	Depuis 1997, 1 860 domiciles, fermes et commerces de la vallée de la rivière Rouge (soit environ 97 % des bâtiments) ont été élevés à un niveau correspondant à celui des inondations de 1997, plus 2 pieds. De plus, 14 collectivités de la vallée de la rivière Rouge ont également été élevées à un niveau correspondant à celui des inondations de 1997, plus 2 pieds.	La situation s'améliore d'année en année.	<ul style="list-style-type: none"> La Loi sur l'aménagement hydraulique stipule que toute nouvelle construction dans la vallée de la rivière Rouge doit se trouver à un niveau correspondant à celui des inondations de 1997, plus 2 pieds. Le programme des travaux d'amélioration des ouvrages de protection contre les inondations de Ralls Island est terminé. On a accru de la capacité de pompage en cas d'inondations dans la vallée de la rivière Rouge à Rosenort grâce à la nouvelle station de pompage, et le ministère prépare les plans d'une nouvelle station de pompage améliorée située au 14^e mille à The Pas. Le début des travaux est prévu en 2009. De nouveaux dispositifs de contrôle ont été installés à la station de pompage de The Pas afin d'accroître la capacité de pompage dans certaines conditions. Entre autres, les nouvelles grilles à barreaux de la station de pompage visent à renforcer la sûreté des travailleurs et à réduire le temps d'arrêt de la station. Le ministère a mis au point un nouveau programme de réduction des embâcles, qui comprend l'achat d'un deuxième Amphibex et un projet d'achat de trois brise-glaces amphibiés. Pendant l'exercice, le ministère a également adapté et réparé son appareil Amphibex et a étudié l'efficacité du brisage des glaces dans la réduction des embâcles et des risques d'inondations. Les cartes des zones exposées aux inondations font l'objet d'une étude et d'une mise à jour afin de préciser les biens vulnérables. Les études menées conjointement avec le gouvernement fédéral dans le but

<i>Indicateur et méthode utilisée</i>	<i>Importance de l'indicateur</i>	<i>Point de départ</i>	<i>Valeurs les plus récentes</i>	<i>Tendance à long terme</i>	<i>Notes, mesures récentes ou liens vers des rapports</i>
					<p>d'accroître les capacités du barrage et du réservoir de Shellmouth se poursuivent et en sont à l'étape de l'étude environnementale. De nouveaux piézomètres ont été installés afin de surveiller l'état de sûreté de l'ouvrage.</p> <ul style="list-style-type: none"> • L agrandissement du canal de dérivation de la rivière Rouge respecte les délais prévus et les travaux d'excavation du canal devraient se terminer au plus tard le 31 mars 2009. • Aux printemps 2006, 2007 et 2008, toutes les digues ont fonctionné adéquatement et il n'y a eu aucun bris. Toutefois, les remblais instables en bordure des barrages de St. Jean et d'Emerson pourraient en menacer la sûreté, et des indicateurs de descente ont été installés pour surveiller l'évolution de la pente. • L exploitation du barrage de Shellmouth et du système de dérivation de Portage a réduit les inondations le long de la rivière Assiniboine en 2007 et a permis d'éviter des inondations en 2008. • L exploitation du canal de dérivation de la rivière Rouge a grandement réduit les pointes de crue à Winnipeg en 2005 et en 2006.

Indicateur et méthode utilisée	Importance de l'indicateur	Point de comparaison	Valeurs les plus récentes	Tendance à long terme	Notes, mesures récentes ou liens vers des rapports
<p>L'empreinte environnementale associée à l'utilisation de l'eau et l'efficacité des programmes de sensibilisation à la question de l'eau au Manitoba, mesurées d'après la consommation d'eau par habitant, tant pour des usages domestiques qu'industriels (à Winnipeg, à Brandon et à Portage-la-Prairie).</p> <p>À l'heure actuelle, on mesure uniquement l'empreinte et la sensibilisation des usagers en milieu urbain.</p>	<p>Il est important de mesurer l'empreinte environnementale et l'efficacité des programmes de sensibilisation, car :</p> <ul style="list-style-type: none"> • on vise la réduction de l'empreinte environnementale; • la consommation d'eau par habitant influence les besoins en infrastructures; • l'intensité de l'utilisation des ressources en eau est un indicateur clé d'environnement (indicateur de l'Organisation de coopération et de développement économiques). 	<p>La consommation d'eau globale de la Ville de Winnipeg était de 495,2 litres par habitant par jour (l/h/j) en 1988.</p>	<p>En 2007, à Winnipeg, la consommation d'eau par habitant était de 333,8 l/h/j (usage résidentiel et commercial, y compris les pertes).</p> <p>En 2005, à Portage-la-Prairie, la consommation d'eau était de 969 l/h/j (tous usages confondus, y compris la consommation de 583 l/h/j des usines de Simplot et de McCain), de 678 l/h/j pour les usages commerciaux et industriels et de 242 l/h/j pour l'usage résidentiel. On y accusait une perte de 48 l/h/j.</p> <p>En 2006, à Brandon, la consommation d'eau était de 438 l/h/j, de 240,8 l/h/j pour l'usage résidentiel seulement, et de 175 l/h/j pour les usages commerciaux et industriels. On y accusait une perte de 43 l/h/j.</p>	<p>La tendance en ce qui concerne la consommation d'eau globale (résidentielle et commerciale) pour la ville de Winnipeg indique une diminution constante. Elle est passée de 495,2 l/h/j en 1988 à 333,8 l/h/j en 2007.</p> <p>À ce jour, en ce qui concerne Brandon et Portage-la-Prairie, aucune tendance dans la consommation d'eau globale ne peut être établie.</p>	<p>L'Organisation de coopération et de développement économiques (OCDE) précise dans son document <i>Indicateurs clés d'environnement</i> que l'intensité de l'utilisation des ressources en eau constitue un indicateur clé d'environnement. Cet indicateur permet d'établir des liens entre des projets nationaux et internationaux.</p> <p>Environnement Canada et les provinces se servent de l'utilisation des ressources en eau pour mesurer l'efficacité des programmes et des activités de sensibilisation de la population à l'importance et à la valeur de l'eau.</p> <p>Actuellement, on ne mesure la consommation d'eau et la sensibilisation à cet égard qu'en milieu urbain, mais on s'emploiera à étendre cette mesure à tout le Manitoba.</p> <p>À l'aide des programmes et des mesures d'utilisation efficace de l'eau mis en œuvre par Gestion des ressources hydrauliques Manitoba, en collaboration avec Sciences, Technologie, Énergie et Mines Manitoba, on s'attend à réaliser davantage d'économies d'eau.</p>

Indicateur et méthode utilisée	Importance de l'indicateur	Point de départ	Valeurs les plus récentes	Tendance à long terme	Notes, mesures récentes ou liens vers des rapports
Les 400 réseaux publics d'alimentation en eau potable du Manitoba, qui desservent environ 80 % de la population de la province (le reste de la population utilise des puits privés ou ses réseaux d'alimentation en eau relèvent du gouvernement fédéral, comme c'est le cas pour les Premières nations).	<p>Il est important de mesurer la salubrité de l'eau potable du Manitoba afin de réduire les risques pour la santé publique que pourrait causer la consommation d'eau contenant :</p> <ul style="list-style-type: none"> • des bactéries, des virus ou des protozoaires pathogènes; • des contaminants chimiques qui pourraient entraîner des problèmes de santé tels qu'un risque accru de cancer. <p>Il est important de mesurer les concentrations de désinfectants (généralement de chlore) dans l'eau potable pour vérifier si les réseaux sont</p>	<p>Le pourcentage de référence des réseaux publics d'alimentation en eau du Manitoba conformes aux exigences réglementaires en matière de vérification et de présentation de rapports ainsi qu'aux normes de qualité de l'eau se situait à 85 % en 2006.</p> <p>Ce pourcentage de 85 % représentait le pourcentage de conformité associé aux 400 réseaux publics d'alimentation en eau, parmi lesquels bien des réseaux sont petits et ne disposent pas toujours des ressources nécessaires pour assurer la conformité.</p> <p>Pour ce qui est de la population, plus de 95 % de la population desservie par un réseau public d'alimentation en eau recevait de</p>	<p>Le pourcentage le plus récent pour ce qui est du respect des exigences réglementaires en matière de vérification et de présentation de rapports ainsi que des normes de qualité de l'eau se situait à 72 % en 2003. Le programme de surveillance de la conformité du Service de l'eau potable a été mis en place cette même année.</p>	<p>De 2003 à 2006, le pourcentage de conformité s'est amélioré en raison de l'embauche de nouveaux agents du Service de l'eau potable, qui fournissent des services liés à la réglementation, ainsi que des services techniques.</p> <p>La conformité pourrait diminuer légèrement au fur et à mesure où les agents découvrent de petits réseaux non pris en compte qui ne disposent pas des ressources financières nécessaires pour se conformer aux règlements.</p> <p>En vertu de la <i>Loi sur la qualité de l'eau potable</i>, les propriétaires des réseaux publics d'alimentation doivent obtenir</p>	<p>Pour de plus amples renseignements, consulter le site Web du Service de l'eau potable à l'adresse suivante : http://www.gov.mb.ca/waterstewardship/odw/index.html (en anglais seulement)</p> <p>Des documents techniques sont publiés sur ce site Web. La <i>Loi sur la qualité de l'eau potable</i> exige la présentation d'un rapport annuel.</p> <ul style="list-style-type: none"> • La qualité de l'eau potable est protégée grâce à l'obligation pour les propriétaires des réseaux d'alimentation en eau d'obtenir des permis de construire et des permis d'exploitation, aux inspections régulières et ponctuelles des installations, à la surveillance de la qualité selon le calendrier obligatoire et à l'éducation continue du public et du personnel des services publics. • L'obligation d'obtenir une licence ou un permis assure au moins un respect minimum des normes techniques et des normes de construction. • Les inspections des installations garantissent un rendement minimal des opérations, ainsi que le respect de normes de qualité de l'eau et une obligation continue de faire rapport et de rendre des comptes au public. • Toutes les activités sont axées sur l'importance de la protection de la santé publique, une protection qui passe par l'assurance de la qualité et de la fiabilité de l'approvisionnement en eau et par le maintien de la confiance du public.
Les réseaux publics provinciaux sont régis par des règlements qui prévoient : des calendriers d'analyse et des normes en matière de qualité bactériologique de l'eau, ainsi que des calendriers d'analyse et des normes concernant la présence de chlore résiduel.					
La fréquence d'analyse et les limites					

<i>Indicateur et méthode utilisée</i>	<i>Importance de l'indicateur</i>	<i>Point de départ</i>	<i>Valeurs les plus récentes</i>	<i>Tendance à long terme</i>	<i>Notes, mesures récentes ou liens vers des rapports</i>
<p>acceptables figurent dans les <i>Recommandations pour la qualité de l'eau potable au Canada</i> de Santé Canada, de même que dans les normes provinciales. Le degré de conformité est mesuré de manière à indiquer le pourcentage de réseaux qui satisfont aux exigences réglementaires.</p>	<p>désinfectés adéquatement, et ce, afin de garantir la salubrité de l'eau qui circule dans les canalisations.</p>		<p>l'eau d'un réseau conforme aux exigences plus de 95 % du temps.</p> <p>Environ 10 % des Manitobains utilisent des puits privés, et 5 % des Manitobains résident dans des terres des Premières nations.</p>	<p>des licences assorties de normes resserrées en matière d'exploitation et de surveillance. Étant donné que les critères servant à établir la conformité s'élargissent, on s'attend à une diminution du pourcentage de réseaux conformes.</p> <p>Des calendriers d'analyse applicables aux systèmes semi-publics sont entrés en vigueur le 1^{er} mars 2008.</p>	

THE PUBLIC INTEREST DISCLOSURE (WHISTLEBLOWER PROTECTION) ACT

The Public Interest Disclosure (Whistleblower Protection) Act came into effect in April 2007. This law gives employees a clear process for disclosing concerns about significant and serious matters (wrongdoing) in the Manitoba public service, and strengthens protection from reprisal. The Act builds on protections already in place under other statutes, as well as collective bargaining rights, policies, practices and processes in the Manitoba public service.

Wrongdoing under the Act may be: contravention of federal or provincial legislation; an act of omission that endangers public safety, public health or the environment; gross mismanagement; or, knowingly directing or counseling a person to commit a wrongdoing. The Act is not intended to deal with routine operational or administrative matters.

A disclosure made by an employee in good faith, in accordance with the Act, and with a reasonable belief that wrongdoing has been or is about to be committed is considered to be a disclosure under the Act, whether or not the subject matter constitutes wrongdoing. All disclosures receive careful and thorough review to determine if action is required under the Act, and must be reported in a department's annual report in accordance with Section 18 of the Act.

The following is a summary of disclosures received by Manitoba Water Stewardship for fiscal year 2007-2008.

Information Required Annually (per Section 18 of The Act)	Fiscal Year 2007 - 2008
The number of disclosures received and the number acted on and not acted <i>Subsection 18(2)(a)</i>	NIL
The number of investigations commenced as a result of a disclosure. <i>Subsection 18(2)(b)</i>	NIL
In the case of an investigation that results in a finding of wrongdoing, a description of the wrongdoing and any recommendations or corrective actions taken in relation to the wrongdoing, or the reasons why no corrective action was taken. <i>Subsection 18(2)(c)</i>	NIL

LOI SUR LES DIVULGATIONS FAITES DANS L'INTÉRÊT PUBLIC (PROTECTION DES DIVULGATEURS D'ACTES RÉPRÉHENSIABLES)

La *Loi sur les divulgations faites dans l'intérêt public (protection des divulgateurs d'actes répréhensibles)* est entrée en vigueur en avril 2007. Cette loi prévoit une démarche claire à suivre par les employés lorsqu'ils veulent communiquer leurs inquiétudes concernant certains actes répréhensibles graves commis dans la fonction publique, et protège également les divulgateurs contre les représailles. La *Loi* vient s'ajouter à d'autres mesures de protection déjà en place en vertu d'autres lois ainsi qu'aux droits issus d'une négociation collective, de politiques, de pratiques ou de processus en vigueur dans la fonction publique du Manitoba.

Les actes suivants sont considérés comme répréhensibles en vertu de la *Loi* : infractions aux lois fédérales ou provinciales; actions ou omissions causant un risque pour la sécurité ou la santé du public ou pour l'environnement; cas graves de mauvaise gestion ou le fait de sciemment ordonner ou conseiller à une personne de commettre un acte répréhensible. La *Loi* n'a pas pour objet de traiter des questions courantes de fonctionnement ou d'administration.

Une divulgation faite de bonne foi, conformément à la *Loi*, par un employé qui a des motifs raisonnables de croire qu'un acte répréhensible a été commis ou est sur le point de l'être, est considérée une divulgation en vertu de la *Loi*, peu importe si l'objet de la divulgation constitue un acte répréhensible. Toutes les divulgations font l'objet d'un examen attentif et approfondi en vue de déterminer si des mesures s'imposent en vertu de la *Loi*, et elles doivent être signalées dans le rapport annuel du ministère, conformément à l'article 18 de la *Loi*.

Vous trouverez ci-dessous un compte rendu des divulgations reçues par le ministère Gestion des ressources hydriques Manitoba pour l'exercice 2007-2008:

Renseignements exigés annuellement (selon l'art. 18 de la <i>Loi</i>)	Exercice 2007 - 2008
Le nombre de divulgations reçues et le nombre de divulgations auxquelles il a été donné suite et auxquelles il n'a pas été donné suite. <i>Alinéa 18(2)a)</i>	NÉANT
Le nombre d'enquêtes ouvertes à la suite d'une divulgation. <i>Alinéa 18(2)b)</i>	NÉANT
Dans le cas où, par suite d'une enquête, il est conclu qu'un acte répréhensible a été commis, la description de l'acte en question ainsi que les recommandations faites ou les mesures correctives prises relativement à cet acte, ou les motifs invoqués pour ne pas en prendre. <i>Alinéa 18(2)c)</i>	NÉANT

LEGISLATION

The Conservation Agreements Act, C.C.S.M. chapter C173
The Conservation Districts Act, C.C.S.M. chapter C175
The Drinking Water Safety Act, C.C.S.M. chapter D101
The Dyking Authority Act, C.C.S.M. chapter D110
The Fisheries Act, C.C.S.M. chapter F90 [except Part III]
The Fishermen's Assistance and Polluters' Liability Act, C.C.S.M. chapter F100
The Ground Water and Water Well Act, C.C.S.M. chapter G110
The Manitoba Habitat Heritage Act, C.C.S.M. chapter H3
The Lake of the Woods Control Board Act, C.C.S.M. chapter L30
The Manitoba Natural Resources Transfer Act (as it relates to water and fisheries), C.C.S.M. chapter N30
The Natural Resources Agreement Act, 1938, C.C.S.M. chapter N40
An Act to ratify a certain Agreement between the Government of the Dominion of Canada and the Government of the Province of Manitoba, C.C.S.M. chapter N50
The Phosphorus Reduction Act (Water Protection Act Amended), SM 2008, chapter W65
The Red River Floodway Act, C.C.S.M. chapter R2
The Shellmouth Dam and Other Water Control Works Management and Compensation Act (Water Resources Administration Act Amended), SM 2008, chapter W70
The Water Power Act, C.C.S.M. chapter W60
The Water Protection Act, C.C.S.M. chapter W65
The Water Resources Administration Act, C.C.S.M. chapter W70
The Water Resources Conservation Act, C.C.S.M. chapter W72
The Water Rights Act, C.C.S.M. chapter W80
The Water Supply Commissions Act, C.C.S.M. chapter W100

and:

Manitoba Fishery Regulations made pursuant to section 43 of the Fisheries Act (Canada)

As per Schedule "Q", Order-In-Council 418/2006

PUBLICATIONS

Fisheries

Manitoba 2007 Angling Guide
A Profile of Manitoba's Commercial Fishery

Water

Assiniboine Delta Aquifer Management Plan (produced in partnership with 45 local stakeholder agencies).
Assiniboine River Water Quality Study. Lake of the Prairies to the City of Brandon
Stephenfield Lake Watershed Management Plan, June 2005 (Produced in partnership with 19 local stakeholder agencies)
Swan Lake Basin Management Plan (produced in partnership with 28 local stakeholder agencies).
Water Quality Assessment of Wekusko Lake, Manitoba, Canada. (April 2005)

